te Itliming Ionumal OMMERCIAL

FORMING A COMPLETE RECORD OF THE PROCEEDINGS OF ALL PUBLIC COMPANIES.

[The MINING JOURNAL is Registered at the General Post Office as a Newspaper and for Transmission Abroad.]

No. 2441.—Vol. LII.

LONDON, SATURDAY, JUNE 3, 1882. RRITISH AND FOREIGN MINING OFFICES.

AUSTIN FRIARS, OLD BROAD STREET, LONDON, E.C.

BANKERS: THE ALLIANCE BANK (Limited).

M ESSES. PETER WATSON AND CO.'S
BRITISH AND FOREIGN MONTHLY MINING NEWS

-STOCK AND SHARE INVESTMENT NOTES - MINES, MINERALS, AND METAL MARKETS - SHARE LIST,

No. 842, Vol. XVII., for JUNE month, is now ready, and will

MESSES. PETER WATSON AND CO., 18, AUSTIN FRIARS, E.C.

M R. ALFRED E. COOKE

MESSES. PETER WATSON AND CO.,

SIXPENCE

MR. JAMES H. CROFTS, STOCK AND SHARE BROKER AND MINING SHARE DEALER, No. 1, FINCH LANE, CORNHILL, LONDON, E.C. ESTABLISHED 1842.

BUSINESS transacted in all descriptions of MINING Stocks and Shares (British and Foreign), Consols, Banks, Bonds (Foreign and Colonial), Railsays, Insurance, Assurance, Telegraph, Tramway, Shipping, Canal, Gas, Vater, and Dock Shares, and all Miscellaneous Shares.

BUSINESS negociated in Stocks and Shares not having a genera market

lue. Every Friday a general and reliable List issued (a copy of hich will be forwarded on application), containing closing rices of the week.

MINES INSPECTED.

BANKERS: CITY BANK, LONDON-SOUTH CORNWALL BANK, ST. AUSTELL.

CON-

Minks Inspected.

Markers: City Bank, London-South Conswall Bank, St. Austell.

Bratadal, 25s.
Bedford United, 35s 9
Brataberg, 33s. 6d.
Brataberg, 33s. 6d.
Callao Bis, 10s. 6d.
Callao Bis, 10s. 6d.
Callao Bis, 10s. 6d.
Consolidated, 5s.
D'Eresby Mount. 13s.
Devon Con., 27%.
Devon Friend, 5s. 6d.
Devon Con., 27%.
Devon Friend, 5s. 6d.
Dane Petro, 6s.
Dane Petro, 6s.
Dane Petro, 6s.
Dane Petro, 6s.
Brata Buellils, 12s.
East Blue Hills, 10s.
East Buellils, 12s.
East Buellils, 12s

ELECTRIC LIGHT SHARES—SPECIAL BUSINESS in Anglo-American Brush, Brush Electric of Scotland, Western Brush, Midland Jrush, Electric Light and Power Generator, Hammond, &c. Shares sold for cash, account, or for forward delivery (one, two, or three

aths) on deposit of 20 per cent. JAMES H. OROFTS, 1, FINCH LANE, LONDON. RAILWAYS — FOREIGN BONDS — SPECIAL BUSINESS.
Fortnighty Accounts opened on receipt of the usual cover.
JAMES H. CROFTS, 1, FINCH LANE, LONDON.

MERICAN AND CANADIAN STOCKS AND SHARES—
SPECIAL BUSINESS.
Fortnightly Acrounts opened on receipt of the usual cover.
JAMES H. CROFTS, 1, FINCH LANE, LONDON.

TNDIAN GOLD MINES.—SPECIAL BUSINESS in:—

Cootacovil. Indian Phoenix. Organos.

Devala Moyar. Indian Kingston. Rhodes Reef
Indian Consolidated. Mysore. Tambracheri
Indian Glenrock. Mysore Reefs, Wynaad Per

Mysore Reels. Wynaad Perseverance.
Ooregum.

At CLOSE MARKET PRICES, free of commission.

. Reliable information given on any of the above. A daily price list issued giving closing quotations. SPECIAL BUSINESS in La Piata, Rio Tinto, frontino and Bolivia, Potesi, Ruby, Nouveau Monde, and Richmond.

. SHARES IN THE ABOVE INDIAN OR OTHER GOLD AND SILVER MINES SOLD FOR FORWARD DELIVERY ONE, TWO, OR THREE MONTHS ON DEPOSIT OF TWENTY PER CENT. JAMES H. CROFTS, 1, FINCH LANE, LONDON. ESTABLISHED 1842.

MR. W. H. BUMPUS, STOCK AND SHARE BROKER. AND MINING SHARE DEALER 44, THREADNEEDLE STREET, LONDON, E.C. ESTABLISHED 1867.

BUSINESS transacted in STOCK EXCHANGE SECURITIES and MISCELLANEOUS SHARES of every description.
RAILWAYS, BANKS, FOREIGN and COLONIAL BONDS.
TRAMWAYS, TELEGRAPHS, and all the LEADING INVESTMENTS.
Accounts opened for the Fortnightly Settlement
A List of Investments free on application.
MR. BUMPUS has SPECIAL BUSINESS in the undermentioned:—

100 Almada, 11s. 3d. 25 Arendal. 25 Arendal.
26 Brataberg, 33s. 9d.
26 Brataberg, 33s. 9d.
27 Bedford United, £2,
28 Ohite Gold, 8s.
27 Connolidated,
28 Copiapo, £3%,
29 Copiapo, £3%,
29 Copiapo, £3%,
29 Copiapo, £3%,
20 Colano Bis, 11s,
25 Oarnarvon, 13s. 6d.
27 Oarnarvon, 13s. 6d.
28 Derwent, 1is. 3d.
29 Devon Friendship,
27 Devals-Moyar, 27s.
2 Doleoath,
29 Devon Great United,

ts.

ted

DES

SPECIAL BUSINESS, at close prices, in the SHARES of all the principal HOME and FOREIGN MINES.

IMPORTANT TO INVESTORS.—Shares in SOUND DIVIDEND and PROGRESSIVE MINES (particularly TIN and COPPER) should be bought at present prices, as many of them are likely to have a considerable rise within the new months.

Mr. Bumpus devotes specialattention to these Securities, and is in a position loafford reliable information and advice to intending investors and others.

WHEAL GRENVILLE and WEST GODOLPHIN shares are recommended

WILLIAM HENRY BUMPUS, SWORN BROKER. OFFICES: 44, THREADNEEDLE STREET, LONDON, E.C. ESTABLISHED 1867.

A BBOTT AND CO., STOCK AND SHARE BROKERS, 9, CORNHILL, LONDON, E.C.

***BLECTRIC LIGHT** shares dealt in at closest prices. WHEAL GEORGE shares, £3½, will have as great a rise as Brush Lights have had.

June Circular on application.

MR. JOHN RISLEY, STOCK AND S 38, OORNHILL, LONDON, ESTABLISHED TWENTY YEARS BANKERS: LONDON AND WESTMINSTER

BROKER.

of EVERY DESCRIPTION.
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STOCKS AND SHARES FOR SALE.

Mr. ALFRED E. Cooke can SELL the following lots (or any smaller number of shares) to immediate applicants at prices annexed, free of commission.

Where prices are not inserted, the market price of the day will be taken, or offers may be made:

20 Bediford Uni. C., 33s. 9

70 Indian Glenrock Gold
30 Bratsberg Cop., 33s. 6

50 Carnarvon Cop., 11s

20 Callao-Bis Gold, 10s.
50 Devala Gold, 21s.
50 Devala Gold, 21s.
50 Devan Gr. Uni. 12s. 6

50 Devon Orn. Copper.
40 Don Pedro Gold.
210 Devon Con. Copper.
40 Don Pedro Gold.
210 Devon Con. Copper.
40 Don Pedro Gold.
211 East Lovell Tin, £1½.
50 East Roman Gravels

Lead, 12s.
22s. 6d.
30 East Roman Gravels

Lead, 12s.
50 Mysore Gold.
30 Mysore Gold.
310 East Blue Hills Tin, 10s. 3d.
30 Eng.-Australian Gold
30 Gold.
30 New West Caradon
30 Copper, 10s. 6

30 No. Herodefoot, 3s. 9d.
30 Hay Sore Gold, 14s. 3d.
30 Hay Sore Gold, 14s. 3d.
30 Hay Sore Gold, 14s. 3d.
30 Hay Sore Gold, 10s.
50 Hay Sore Gold, 10s.
50 Hay Sore Gold, 10s.
50 East Roman Gravels

Lead, 12s.
50 Mysore Gold, 10s.
50 Hay Sore Gold, 10s.
50 Hay Sore

LOW PRICED SHARES-WORTH BUYING. DEVON Present price 5s. 3d, FULLY-PAID. NO FURTHER CALLS. RISE of 100 to 400 per cent. PROBABLE. SORTRIDGE Present price 4s. 3d. FULLY-PAID. NO FUR-THER OALLS. Returns of tin are shortly expected. There is a margin for a GREAT RISE.

Present price 10s. 3d. Nearly £2000 cash in hand, besides several hundreds of pounds worth of tin, which will soon be sold. MONTHLY PROFITS are being made, and immediate dividends are anticipated, when the shares may double in price. EAST BLUE HILLS TIN.

Persent price 10s. 6d. Next call will probably not exceed 1s. per share. Great prospects of copper lode steadily improving, and shares are likely to DOUBLE or TREBLE IN VALUE. WEST CREBOR.

NEW WEST CARADON.

GREAT

WEST DEVON Present price only 3s. Call just made, so no fur-ther call will be required for three or four months, and then it may not exceed 1s. per share. Mine in a splendid locality, and a rise of several hundreds per cent, in value is probable.

cent. in value is probable.

Present price about \$\frac{2}{8}\$. Next call may not exceed ls. Mine has splendid prospects, similar to Devon Great Consols, when on the discovery of the immense deposit of copper SHARES ROSE FROM £1 to OVER £300 per share. At the recent meeting of Devon Great Consols LORD CLAUD HAMILTON stated that this "GREAT DISCOVERY WHICH MADE DEVON CONSOLS CELEBRATED WAS UNEX-PECTED TEN MINUTES BEFORE IT TOOK PLACE." As a fact the lode was WORTH £1000 per fathom, but FIVE MINUTES before the miners had no idea that they were coming to it. WEST DEVON GREAT CONSOLS is a grand speculation, and may prove as great a surprise. CONSOLS. prove as great a surprise

FOREIGN STOCKS. ENGLISH AND AMERICAN RAILWAYS.

SPECIAL REPORT on the markets, and DAILY or WEEKLY PRICE LIST forwarded on applica-tion. Business executed at close net prices either for INVESTMENT or SPECULATION.

TELEGRAMS and LETTERS receive immediate attention. All shares curently dealt in, bought and sold, free of commission. SPECIAL BUSINESS
AT
CLOSE PRICES. INDIAN GOLD MINES,

SPECULATIVE ACCOUNTS OPENED ON RECEIPT OF COVER. SHARES BOUGHT AND SOLD AT CLOSEST NET PRICES. ALFRED E COOKE, 9, OLD BROAD STREET, LONDON.

cosite the Stock Exchange, with which the offices are in DI

TELEGRAPHIC COMMUNICATION.)

R. JAMES STOCKER, STOCKBROKER,

2, CROWN COURT, THREADNEEDLE STREET, LONDON, E.C.,

Has special business in the following for cash or settlement by arrangement:—

Brataberg, 22s. Gawton, 10s, 9d.

Bedford United, 38s 9d.

Bewich, 12s. Ghundian Glenrock, 20s.

Chill Gold, 7s. 6d.
Clitters, £256.
Consolidated, 4s. 9d.
Devon Friendship, 5s. 6.

Devals Moyar, 20s. 6d.

Managa.

Killifreth, £5 6s.
Killifreth, £5 6s.
South Devon, 15s.
So. East Wynand, 50s.
Souback, 20s.
Tankerville, 5s. 3d.
Tanar, 9s.
Tanar, 9s.

Bedford United, 33s 9d Bwlch, 12s. Chill Gold, 7s. 6d. Clitters, £255. Consolidated, 4s. 9d. Devon Friendship, 5s. 6 Devala Moyar, 20s. 6d. Don Pedro, 6s. Eberhardt, 12s. East Blue Hills, 11s. 3d East Caradon, 7s. 6d. East Chiverton, 30s.

Kilifreth, £5 6s.
La Plata, 40s.
Leadhills, 45s.
Mona, £43½.
New Kitty, 38s. 9d.
Nouveau Monde, 5s. 9d.
Organos, 17s. 6d.
Parys Corporation 9s. 9
Prince of Wales, 8s. 9d. BANKRES: LONDON AND WESTMINSTER.

Tamar, 9s. Van, £5½. West Orebor, 11s. 3d. West Etty, £8 1s. West Devon, 7s. 9d. Wheal Basset, £8 8s. 9d

FERDINAND R. KIRK, STOCKBROKER,

5. BIRCHIN-LANE, LONDON, E.O.

Fortnightly Accounts opened in all Stock Exchange Securities on receipt of
the usual cover. BANKERS; LONDON AND WESTMINSTER, Lothbury.

THE "DIFFERENTIAL PUMPING ENGINE (DAVEY'S PATENT,

DRAINING MINES, WATER SUPPLY OF TOWNS, IRRIGATION, SUPPLYING DOCKS, PUMPING SEWAGE, and GENERAL PUMPING PURPOSES.

HATHORN, DAVEY, AND CO., LEEDS.

HATHORN, DAVEY, and Co. have Patterns of "Differential" Engines of all sizes, from 5 to 500-herse power, and have facilities for supplying very powerful Engines and Pumps at a short notice.

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M B. A L F R E D T H O M A S, MINING AGENT, AND STOCK AND SHARE DEALER, 10, COLEMAN STREET, LONDON, E.C.

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37. WALBROOK, LONDON, E.C.
Established Twenty-five Years.

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Mr. REYNOLDS refers to his letter on Page 663 in this day's Journal.

M ESSRS. H. R. LEWIS AND CO., BARTHOLOMEW HOUSE, BARTHOLOMEW LANE, LONDON, E.C., MINING ENGINEERS, EXPERTS, AND DEALERS.

Sound and Experienced Advice in the Selection of Mining Securities—Homend Foreign. Weekly Price-List free on application.

MESSRS. J. TAYLOR AND CO.

MINING ENGINEERS AND INSPECTORS.

86, LONDON WALL, LONDON, E.C.,
Have Agents in the various Mining Districts of Great Britain, the Continent,
Australia, and the United States of America.
Inspections undertaken, either personally or by our Agents, and Reports of
Advice as to Working given.

Advice as to Working given.

MR. W. MARLBOROUGH, STOCK AND SHARE DEALER

29. BISHOPSGATE STREET, LONDON, E.C. (Established 30 Years)

Can SELL the following BHARES at prices annexed:

40 Bedford Unit., 38s., 9 30 East Blue Hills, 11s. 3

50 Bratsberg Cop., £1 126 20 Glenroy, 3s. 5d.

50 Carnarvon Cop., £26 100 Gogiana, 15s. 5d.

100 Chile Gold, 10s.

50 Carnarvonshire Con.

50 Carnarvonshire Con.

51 11s. 3d.

15 Killifreth, £6.

51 Day D'Eresby Mount, 13s

61 Do D'Eresby Mount, 13s

62 Devon Great Uni., 10s

63 Dev. Friendship, 5s.

150 Exchequer, 3s. 3d.

50 Per. Friendship, 5s.

150 Exchequer, 3s. 3d.

150 Cranarvonshire Con.

15 Killifreth, £6.

15 West Devon, 15s.

15 West Crebor, 11s.

25 West Devon.

26 West Devon.

27 Wheal Crebor, £34.

50 West Devon.

28 West Devon.

29 West Caradon, 8s. 6d.

50 West Devon.

20 West Devon.

20 West Devon.

20 West Devon.

20 West Devon.

21 West Cerbor, 11s.

20 West Devon.

20 West Devon.

21 West Devon.

21 West Devon.

21 West Devon.

21 West Devon.

22 Wheal Crebor, £34.

23 Wheal Rasset, £10.

cent.

SPECIAL BUSINESS in Indian gold mines, also in rails, trams, Egypts, Ottoman Banks, Turks, and Lombards, for each or account on receipt of usual cover.

BANKERS: ALLIANCE BANK (Limited)

THE FOLLOWING SHARES are strongly RECOMMENDED FOR INVESTMENT:—Tolima A, paying 14 per cent. per annum, Tolima B, Colombian Gold, Organos Gold, Corporation South Australian Copper; this company possess no less than 83 distinct mineral proporties.
Full particulars of the above on application to W. Marlborough, 29, Bishopsgate-street, E.C.

MR. ALEXANDER DAVIDSON
STOCK AND SHARE DEALER,
LEADENHALL HOUSE, 101, LEADENHALL STREET, LONDON, E.C. DAVIDSON,

FOR SALE, FOR CASH. OFFERS CAN BE MADE for the following, or

FOR SALE, FOR CASH.

AND PART:—
250 Bratsberg.
80 Bedford United.
50 Garn Camborne.
110 Organos Gold.
450 Devon Friendship.
200 Days Monatain.
200 Devon Great Consols.
140 Prince of Wales.
150 East Wheal Rose.
100 Polrose.
190 East Blue Hills.
150 Richmond.
150 Great Polgooth.
150 Roman Gravels.
150 Gunnislake (Clitters).
110 South Darren.
130 La Piata, £2 is.
130 Indian Consolidated.
130 Indian Consolidated.
130 Wheal Agar.
130 Indian Consolidated.
130 Richmond.
130 Indian Consolidated.
130 Indian Consolidated.
130 Indian Consolidated.
130 Richmond.
130 Indian Consolidated.
130 Indian Tonsolidated.
130 Indian Tonsolidated.
130 Richmond.
130 Indian Consolidated.
130 Indian Tonsolidated.
130 Indian Trevelyan.
130 Indian Trevelyan.
130 Indian Trevelyan.
130 Indian Phomix.
130 Indian Trevelyan.
130 Indian Phomix.
130 Indian Trevelyan.
130 Indian Phomix.
130 I

MR. E. J. BARTLETT, 30, GREAT ST. HELENS, LONDON E.C., has special dealings in Stock Exchange Securities and Miscellaneou Shares of every description.

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Published by E. J. BARTLETT, F.R.G.S., 30, Great St. Helens, London, E.C.

GRANVILLE SHARP, STOCK AND SHARE DEALER, 32, QUEEN VICTORIA STREET, LONDON, E.C., Recommends the immediate purchase of shares in the

EAST CHIVERTON SILVER-LEAD MINE, BANKERS: LONDON AND WESTMINSTER, London, E.C.

MESSRS. ENDEAN AND CO., STOCK AND SHARE DEALERS, \$5, GRACECHURCH STREET, LONDON, E.C. ESTABLISHED 1861.
Bankers: London and Westminster, Lothbury, E.C.

ESSRS. ABBOTT AND WICKETT, STOCK AND SHARE BROKERS, REDRUTH. ORDERS BY TELEGRAM PROMPTLY EXECUTED.

JOHN H N L. M. F R A S E R, GREENFIELDS, WREXHAM. $\mathbf{M}^{\, ext{R}}$.

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ESTABLISHED 1877.

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Consulting Mining Engineer, Secretary, and Auditor.

Reports, Valuations, Surveys, &c.

Mines, Collieries, &c., supplied with all kinds of Plant, Machinery, & Materials.

Old Metal, Scrap iron, New and Old Machinery Bought, Sold, or E: changed,

Coal, Coke, Fron, Lime, Timber, Brick, and Slate Merchant.

A Select List of Mines that will increase from 300 to 500 per cent. on present

THE SUBSCRIPTION LIST WILL CLOSE ON OR BEFORE MONDAY, THE 12TH JUNE, 1882.

MAXIM AND WESTON MACHINES, ARC AND INCANDESCENT LAMPS.

The British Indian Electric Light and Power Company

FOR CALCUTTA, MADRAS, BOMBAY, ALLAHABAD, LAHORE, &c., AND THE WHOLE OF BRITISH INDIA.

Incorporated under the Companies' Acts, 1862 to 1880, whereby the liability of Shareholders is limited to the amount of their Shares. CAPITAL £250,000, IN 50,000 SHARES OF £5 EACH.

Of which 5000 are reserved for payment to the Vendors, and the remaining 45,000 Shares are now offered for subscription to the public. Payable—10s. per share on application, 10s. on allotment, and £1 on 1st August, 1882. Future calls not to exceed £1 at not less than two months' interval. DIRECTORS.

The Right Hon. The EARL DE LA WARR, 60, Grosvenor Street, W.—Chairman.

Admiral Sir EDWARD AUGUSTUS INGLEFIELD, C.B., D.C.L., F.R.S. (Chairman of the Electric Light and Power Generator Company, Limited), 99, Queen's Gate, S.W. Admiral Sir EDWARD AUGUSTUS INGLEFIELD, C.B., D.C.L., F.R.S. (Chairman of the Electric Light and Power Generator Company, Limited), 99, Queen's Gate, S.W. GEORGE INVERARITY, Esq. (formerly Commissioner of Customs and Reporter-General of External Commerce, Bombay Presidency), 13, Stanhope Gardens, S.W. General Sir MICHAEL KENNEDY, R.E., K.C.S.I. (late Secretary to the Government of Bombay in the Public Works and Railway Departments), 26, Leinster Square, W. WORSLEY ROBERTS, Esq. (Managing Director Messrs. Pigou, Wilks, and Lawrence, Limited), 11, Queen Victoria Street, E.C.

CONSULTING ELECTRICIAN—WILLIAM CROOKES, Esq., F.R.S., 7, Kensington Park Gardens, W.

Bankers—The LONDON AND WESTMINSTER BANK (Limited), 41, Lothbury, E.C.

Secretary—H. T. McNEALE, Esq.

REGISTERED OFFICES—5, AUSTIN FRIARS, E.C.

PROSPECTUS.

The demand for electric lighting all over the world has lately been making rapid strides, and the readiness with which capital has been subscribed for the more recent undertakings, having for their object the use of electricity for generating light and power, is clear evidence of the general conviction that the electric light is the light of the immediate future.

No people in the world admire good lighting worse that the particles.

dence of the general conviction that the electric light is the light of the immediate future.

No people in the world admire good lighting more than the natives of India, and none make more habitual, skilful, and lavish use of Illuminations on all occasions of festival and display. The electric light generates but little heat compared with other kinds of lighting, and is, therefore, specially suitable for the climate of India, while the softness and beauty of the incandescent lamps render them peculiarly attractive for the lighting of bungalows and palaces. There is, then, reason for confidence that so soon as electric lighting has been thoroughly made known among the European and native communities in India, it will come rapidly into general and varied use.

This company has accordingly been formed for the purpose of working throughout British India all the valuable patents and systems possessed by the Electric Light and Power Generator Company (Limited). The field open fer this company's operations is very extensive, embracing the Presidency towns of Calcutta, Bombay, and Madras; the great native cities, Hyderabad, Mysore, Indore, Baroda, Nagpore, Lucknow, Ahmedabad, Poonah, Benares, Agra, Allahabad, Delhi, Umritsur, and Lahore, &c., the important military stations of Secunderabad, Kirkee, Bangalore, Mhow, Meerut, Mean Meer, Umballa, Peshawur, and many others; not omitting the palaces and houses of rajahs, chiefs, and men of wealth, who will probably avail themselves of electric lighting directly its practical and artistic uses are brought to their knowledge. It may be mentioned that promises of support from the owners of important factories and steamships have been already communicated to the directors.

The Electric Light and Power Generator Company (Limited), under take the supply to this company, on very favourable terms, of all the Weston, Rapieff, Lontia, and Maxim machines, lamps, &c., and the further right to any future improvements therein. Also the right to manufacture in England, for use or sale in

lamps, machines, and appliances appertaining to the company's

The company further acquires the option to purchase for a not exceeding £25,000 in cash or shares, as the directors may determine, the exclusive right in British India, under patents recently granted, in an accumulator or secondary battery for the storage of electricity, subject to its efficiency being proved to the satisfaction

of the company.

The value of an accumulator or secondary battery for the storage

system.

In illustration of the above, the following extracts are referred to:
Extract of letter from the United States Electric Lighting Company (the owners of the Maxim and Weston patents in the United States, &c.) to the Electric Light and Power Generator Company (Limited), dated New York, 1st May, 1882:

"We have one of our 50-light incandescent machines, running 58 Maxim lamps, in operation upon a ferry boat since October last: 75 per cent. of the lamps originally erected are still in use, having burned more than 1500 hours each; and not one lamp has failed since February 21st, although the lamps are burned daily niue hours or more." daily nine hours or more

Extract of letter from E. H. Thomson to H. T. McNeale, dated

Liverpool, 20th May, 1882:—
"I may remind you that we have had 24 Maxim lights burning provisionally in the auditorium (Prince of Wales Theatre, Liverpool) every night for nearly four months, and I am happy to say that not one has broken or given way during that time. We could scarcely have a better proof of the superiority of these lights."

These high qualities place the Maxim lamp at the head of iocan-descent lamps for the purposes of domestic and internal lighting, while its brilliancy admits of its use for lighting open spaces. This was demonstrated successfully in the quadrangle of Windsor Castle, where it was employed on the accession of the recent Royal marriage. where it was employed on the occasion of the recent Royal marriage With this lamp, the Maxim dynamo-machine and regulator for

of electricity is attested by all the most eminent scientific men of the day. The success of such a battery is practically demonstrated in its application to trains running daily on the London, Brighton, and South Coast Railway. As a reservoir of electricity it is the necessary adjunct which makes electric light as certain as gas, without the destructive tendencies of the latter.

The dynamo-machines and lamps mentioned above have all been thoroughly and commercially tested, and it has been shown that for durability, economy, and effectiveness, they are not surpassed by any existing similar inventions. At the late Exhibition in Paris, the gold medal was awarded to the Maxim and Lontin systems, and a silver medal to the Weston system.

The merit of the Maxim lamp lies in the large amount of light it gives relatively to other incandescent lamps, its durability, and, as a consequence, its relative economy. These lamps can be used to produce the light of 50, or even 100 candles each, and at the rate of six lamps will give an aggregate of 300 to 600 candles per horse-power, the light at the same time being soft and pleasant.

The great drawback of incandescent lighting has hitherto been the rapid destruction of the lamps. This is now overcome by the Maxim system.

In illustration of the above, the following extracts are referred to:—

In illustration of the above, the following extracts are referred to:—

The great drawback of incandescent lighting has hither to been the rapid destruction of the above, the following extracts are referred to:—

In illustration of the above, the following extracts are referred to:—

The company is promoted by the vendors, by whom the consideration to be paid has been fixed at £50,000 in cash. The vendors undertake to defray all expenses incidental to the formation of the correction of the formation of the coverage of the covera

of licences for local lighting companies throughout the vast provinces and numerous important towns comprised in the concession and from the manufacture, purchase, sale, and hire of all or any articles in any way connected with electricity, together with the application of electricity as a motive-power, with other developments. The company is promoted by the vendors, by whom the consideration to be paid has been fixed at £50,000, as to £25,000 in fully paid-up shares, and as to £25,000 in cash. The vendors undertake to defray all expenses incidental to the formation of the company up to and including allotment, thus leaving the remainder of the capital—viz., £200,000, available for the development of the company's business, subject, however, to the payment of a further sun of £25,000 in the event of the company electing to purchase the rights for the accumulator. rights for the accumulator.

or 123,000 in the event of the company electing to purchase the rights for the accumulator.

The following are the contracts which have been entered into:—A contract between the Electric Light and Power Generator Company (Limited) of the one part, and Gustavus Palmer Harding, George Augustus Thomson, and Malcolm Low, of the other part, dated the 25th day of May, 1882; a contract between the said Gustavus Palmer Harding, George Augustus Thomson, and Malcom Low, of the one part, and Henry Thomas McNeale, as trustee for the company, of the other part, dated the 25th day of May, 1882; a contract between the said Gustavus Palmer Harding of the one part, and the said Henry Thomas McNeale, as trustee for the company, of the other part, dated 25th day of May, 1882.

These contracts can be seen at the offices of the company's solicitors; the Memorandum and Articles of Association can be seen, and prospectuses and Forms of Application for shares can be obtained at the offices of the company, and of the solicitors.

If no allotment be made, the amount paid on application will be returned in full. A copy of the Memorandum of Association is annexed to the prospectus.—London, 31st May, 1882.

THE TIN TRADE.

) issue the May 31, 1882.	following May 31, 1881.
	8,358 326 200 1,225 1,290 1,724 650
15,479 £97 10 1,342 512	1,037 673
	1,854

Shipments during the month from Straits to London 59 tons, from Australia London 450 tons, from Straits to America 475 tons, from Australia to America 475 tons. Banca in Trading Company's hands and affort, 2660 tons.

Messrs. EBELING and HAVELAAR (Rotterdam, June 1), write: Messrs. EBELING and HAVELAAR (Rotterdam, June 1), write:—
The has ruied tolerably steady during the past month, and prices after slight
fluctuations show but little change from those current at the end of April. No
special feature has presented itself. There has been a satisfactory demand for
consumption which, however, was very freely met. Speculation no doubt has
been kept in check by the almost unprecedented fluctuations during the previous month which as yet public opinion can hardly be said to have overcome.
The Dutch trading company's third sale in 1882 took place yesterday, when
23,530 slabs Banca were sold from 58% fl. to 59 fl., average 58% fl. Next sale
will take place towards the end of July. Banca has been in continued good requesi, the price declining from 59 fl. to 57% fl., then again advancing to 59% fl.
from which we receded to 59 fl., Since the sale there are buyers at 55% fl. Billiton
has experienced about the same variations in prices. The demand has been
limited, and the much spoken of "corner" has not made its appearance thus
far. Our closing quotation is 58% fl. with sellers. The production of Billiton
for 1881-1882 (from May 1, 1881, until the end of April 1882) amounts to 187. Our closing quotation is 58½ fl. with sellers. The production of Button for 1881-1882 (from May 1, 1881, until the end of April 1882) amounts to 66,331 peculs, against 78,928 in 1880-1881; 84,712 in 1871-1880; 93,469 in 1878-1879; 1,794 in 1877-1878. The average production during the last 10 years is about 87,550 peculs. A pull ic sale of from 12,000 to 13,000 peculs will be held at Batavia towards the end of June.
The modition of Banca tin in Holland on May 30, according to the Official Remains of the production of Banca tin in Holland on May 30, according to the Official Remains.

The position of Banca tin in Holland on ;	may 30,	acco	raing t	o the	Omerat ne
urns of the Dutch Trading Company, was-			1001		1880.
			1861.		
Import in MaySlabs	1,468		966		10,640
Total five months	59,070	*****	54,220		33,486
Deliveries in May	11,672		10,946		11,313
Total five months	50,067		65,121		56,598
Btock second hand	45,630				47,251
Unsold Stock	49,538				20,603
Total stock	95,168		84,128		67,854
AffoatPeculs	17,800				
Statement of Billiton:-	21,000		-,		-,
Import in MaySlabs	7,600		8,500		6,729
Total five mouths	52,801				
Deliveries in May	5,189				
Total five months	42,761				
Btock					
AfloatPeculs	16,000				9,000
Quotation, May 31-Banca	5816 11.		5214 1.		43 1/4 11.
Billiton	58 1/2 fl.	******	5234 fl.		43 11.
These combined returns of Banca and B	illiton f	or 18	82, com	pared	with thos

These combined returns of Banca and Billiton for 1892, compared with the for 1891, exhibit—A decrease of the import for May of 12 tons; an increase the import for the five months of 306 tons; a decrease of the deliveries above the tons; a decrease of the deliveries for the five months of 540 ton A decrease of the stock second-hand of 493 tons; an increase of the unsold sto

of 209 tons; a decrease of the total stock of 284 tons; an advance of the quota-tion of Banca of 10% per ton.

EXP	ORL	Marc		OM	HOLLA		 e Mor	242	
	1882.	 1881.	. 1	850.		1882.	1881.		1880.
o GermanyTons	8 267	 351		317	*******	695	 826		863
England	. 4	 19		-		13	 229		
Belgium							 586		874
France						81	 139		
Hamburg									213
The United States	. 6	 _		56		9	 10	***	222
Other countries		7		3	*******		 73		64

THE COPPER TRADE.

Messrs. HENRY R. MERTON and Co. (Leadenhall-street, May 31

sue the following Statistics of Copper:—	
Stocks in Europe :	
Chili bars, Liverpool and SwanseaTons	21,007
Chili ingots, Liverpool and Swanses	1,115
Chili ores and regulus, Liverpool and Swansea (fine)	1,660
Other furnace stuff, Liverpool and Swansea (fine)	2,226
London, Foreign copper (chiefly Australian) and Landing	8,398
Chili bars, ingots and barilla in Havre	2,612
Other copper in Havre	295
Afloat, and chartered from Chili to Europe (advised by mail);	
Ores and regulus (fine)	2,458
Bars and ingots	
By cable, ores and regulus (fine)	450
Bars and ingots	1,550
Affoat from Australia to Europe (advised by mail):	
Fine copper	240
By cable: Fine copper	1,000
Total	45 822

Price of Chili bars, 684, 10s, per ton.
Messrs. HABRINGTON, HORAN, and Co. (Liverpool, May 31). Messrs. Harrington, Horan, and Co. (Liverpool, May 31).—
Chili copper charters for second part of this month were yesterday advised by cablegram as 2500 tons fine, of which 1700 tons bars and ingots, with 400 tons furnace material, are for England, and 400 tons bar for Continent. Price of bars was 419-50 and Exchange 34½d. On the 21st inst. the Eta, with a cargo of about 807 tons regulus from Carrisal to Swansea, foundered after colliding with the Harvey Mills off Crookhaven. After the issue of our last a good business was done in Chili tears up to 684. 15s. spot, and 684. 10s. forward, price then receded about 10s. per ton, and to-day we close firm with buyers at 684. 7s. 6d. spot and 694. 10s. forward. The sales of furnace material comprise—At Liverpool 290 tons Peruvian ore at 13s. 9d., and 60 tons to arrive also at 13s. 9d., 20 tons Chili regulus at 14s., 500 tons at 14s., and 500 tons Cape ore at 12s. 4d., 500 tons at 14s., and 500 tons Cape ore at 12s. 4d., 500 tons at 14s., and 500 tons to arrive also at 14s., and at the Swansea sale by tender 1227 tons ores average produce 7 per cent. realised 13s. 3½d. Precipitate—90 tons English and 100 tons Rio Tinto at 13s. 9d. and 600 tons Fortuguese (Aljustrel) at 14s. per unit. Import of Chili copper during the past fortnight 1710 tons fine, against 1934 tons fine same time last year; delivery of ditto, 2470 tons, against 1855 tons; import of other copper during the past fortnight, 1947 tons, against 1855 tons; import of other copper during the past fortnight, 1947 tons, against 1855 tons; import of other copper during the past fortnight, 1947 tons, against 1855 tons import of other copper during the past fortnight, 1947 tons, against 1855 tons import of other copper during the past fortnight, 1947 tons against 1855 tons inspots, 3 tons gots; 8 tennard Hall, from Valparaiso, 55 tons bars; Bedfordshire, from Valparaiso, 55 tons bars; 19 tons ingots, 8 tons hars; Dunelin, from Valparaiso, 00 tons regulus, 170 tons bars; 10 tons ingots, 8 tons hars; 10 tone, 16 tons

- 3,691 21,007

Representing about 23,782 tons fine copper, against 24,542 tons 15st inst.; 30,655 tons May 31, 1881; 31,810 tons May 31, 1880; 28,852 tons May 30, 1879. Stock of copper contained in other foreign ore and Spanish precipitate, 2222 tons fine, against 1945 tons May 31, 1881. Stock of Chill bars and ingots in Havre, 2572 tons fine, against 4223 tons May 31, 1881. Stock of Core Core barilla in Havre, 53 tons fine, against 423 tons May 31, 1881. Stock of copper other than Chill in Havre, 295 tons fine, against 1078 tons May 31, 1881. Stock of Chill copper affoat and chartered for to date, 9600 tons fine, against 12,500 tons May 31, 1881. Stock of foreign copper in London, chiefly Australian, 840 tons fine, against 833 tons May 31, 1881.

copper affoat and chartered for to date, 9600 tons fine, against 12,500 tons May 31, 1851. Stock of foreign copper in London, chiefly Australian, 8600 tons fine, against 8639 tons May 31, 1851.

Messrs JAMES LEWIS and SON (June 1) write:—The sale for France of 900 tons Chile ingot copper at 52, per ton and of 7000 tons of Tharsis copper, to be delivered at the rate of 1000 tons a month, the price being based on the average of Chili bars for each month, was reported on the 15th int., and on the 22nd of 1000 tons of Lake Superior copper for the same destination at 731. 10s. per ton 1.0.b. in New York. The arrivals from Chili have been 3078 and the deliveries 2936 tons, and from other countries 1830 and 4278 tons fine respectively. The sale of furnace material have been exceedionally large, including 5114 tons of precipitate, and representing 5938 tons of fine copper from countries other than Chili, and 423 tons from Bolivia. The stocks of Chili produce are:—Liverpool, bars, 12,619 tons; ingots, 932 tons; regulus, 345 tons. Swansea, bars, 5838 tons; ingots, 183 tons; regulus, 3346 tons. Total, bars, 21,007 tons; ingots, 1115 tons; regulus, 3591 tons. Equal to 23,722 tons fine, against 23,644 tons of May 1, and against 30,685 tons fine June 1, 1881, when quotations were—Bars, 594, 52; ore, 112, 94. The stocks of other than Chili produce are:—Liverpool and Swansea, 2226 tons fine, against 1945 tons June 1 last year; London, 552 tons fine, against 1833 tons June 1 last year; Havre (Chili, &c.), 3004 tons fine, against 16,325 tons June 1 last year. Total, 1,3,762 tons fine, against 16,325 tons June 1 last year. Total, 1,1474 tons fine, against 16,725 tons fine, against 18,400 tons fine, against 18,500 tons June 1 last year. Total, 1,1474 tons fine, against 16,175 tons fine, against 18,500 tons fine, against 18,500 tons June 1 last year. Total visible supply:—49,019 tons fine, against 16,175 tons fine, against 18,600

COPPER AND TIN .- Messrs. FRENCH and SMITH (June 1) write-COPPER AND TIX.—Messrs. FEBNCH and SMITH (June 1) write-there was more activity in the copper market than for some time past. The idea that consumption may be largely increased by the electrical requirement of the future is again attracting the attention of speculators, and a large qual-tity of Chill bars were taken off the market on that presu mption. Both Englis and French smellers have freely supplied themselves with furnace stuff durin the past mouth, and deliveries, consequently, appear very large. Charters frow West Coast were advised—for first half of May, 1700 tons; and for the secon-half of May, 2900 tons. There was an entire absence of the excitement and vic-lent fluctuations which characterised the tin trade during April, but prices grid dually stiffened up to 90%, per ton for fine foreign. Although there is at pri-sent but little outside speculation in the article the demand for consumption-large, and as shipments for the month are moderate the visible supply for large, and as shipments for the month are moderate the visible supply for Europe, exclusive of quantity in Dutch Trading Company's hands, shows a drive of about 500 tons as compared with last month. Pro-been a g triling, and the in sore saran firm, m and Co. arewar

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and expect we shall do the same. The whole of Ruby Hill has been proved to be one mass of large chambers. It is very hard to find them, but we believe that we shall find them, and we earnestly hope at no very distant date. There is one thing that occurred to me that might, perhaps, be interesting to the shareholders—I forgot to mention it at the time—that is this. In speaking of what the company has done in the ten years since it was incorporated, when I stated that the profits had been 1,001,170L, I might have added that the money has been appropriated in the following way:—In dividends, 272,517L; on expital account, which takes the nature of improvements on the property, and for which we expect we have the value to day, 90,364L; the fire when our works were destroyed cost us 18,155C; law expenses and purchase of mining claims, 63,782C; and at the present moment—that is on Feb. 28—we had in hand undivided profits to the amount of 101,352L. I think you will find that those figures make up the correct total. (Cheers.) With regard to the remarks of the hone, proprietor who spoke first, the money we have in hand is not quite available in the sense he means. Our profits are in lead and bullion, but if we thought it advisable to pay a dividend we have money enough in London to pay it to morrow.

Mr. ARNOLD: The 100,000L is in money's worth?—The CHAIRMAN: Yos, no doubt. All I say is that the suggestion will not be lost sight of it. (Hear, hear.)

The motion was then put and carried unanimously.

Mr. BROUGHTON, in proposing the re-election of the Chairman, who was one of the retiring directors, thought it would be quite superfluous to allude to the eminently valuable services which the Chairman had rendered to the company.

Mr. BROUGHTON, in proposing the re-election of the Chairman, who was one of the retiring directors, thought it would be quite superfluous to allude to the eminently valuable services which the Chairman had rendered to the company but said they could hardly expect to have such a balance-sheet as tha

carried.

Mr. HEJBON then proposed a cordial vote of thanks to the Chairman and directors.—The proposition was seconded by the Rev. Mr. MILLER, and adopted.

The CHAIBMAN, in acknowledging the compliment, expressed the hope that at the next meeting they would have something more pleasant to talk about.

BEDFORD UNITED.—At the ordinary six-monthly meeting held on May 31 (Mr. H. C. Tate, in the chair), the accounts previously circulated amongst the shareholders were passed and the directors' and agents' reports received and adopted. On the question of electing directors for the ensuing year some discussion took place, ending eventually in the appointment of two of the retiring directors and a London and local member of the board. The report on the mine was very satisfactory.

[For remainder of Meetings see this day's Journal.]

FOREIGN MINES.

FOREIGN MINES.

ALAMILLOS LEAD.—May 24: The lode in the 20 driving west of San Martin shaft is producing stones of ore worth ½ ton per fathom. In the 60 driving east of San Felipe shaft the ground is harder for driving through, the lode being valued at ½ ton perfathom. The 40 is being driven west by San Felipe shaft in a rich lode producing 2 tons per fathom. The lode in the 60 driving east of San Enrique shaft is harder for working, having fallen off in value to 1 ton per fathom. In the 130 driving east of Taylor's engine-shaft there is a strong lode, which has further improved to 1 ton 6 ore per fathom. The lode in the 130 driving east of Taylor's engine-shaft does not contain ore enough to value. In the 80 driving east of San Victor shaft the lode produces 2 tons per fathom. The lode in the 50 driving in the same direction is again producing ore worth ½ ton perfathom. In the 80 (middle lode) driving west of San Victor shaft the lode has again become productive being worth 1 ton of ore per fathom. No ore is produced in the 70 driving in the same direction. The 60 cross-cut is being driven south of Judd's shaft at a good rate. Diaz winze sinking below the 70 has preached the depth for the 80; the lode is producing ½ ton per fathom. Good progress is being made in sinking Almansa's winze below the 60. Sinare's winze sinking below the 70 is going through a rich lode east of San Victor shaft worth 2½ tons per fathom.

ANTIOQUIA (FRONTINO) GOLD.—The following is the statement of profit

rings sinking below the 70 is going through a front 24 tons per fathom.

ANTIQUIA (FRONTINO) GOLD.—The following is the statement of profit and loss for the month of March: Estimated value of the gold, including profit exchange, 594.; cost at the mines, at Medellin and in London, 2114.; loss,

In addition to the cost of 2114., the sum of 1554, has been spent on capital.

ANTIOQUIA (PRONTINO) GOLD.—The following is the statement of pront and loss for the month of March: Estimated value of the gold, including proint exchange, 594.; cost at the mines, at Medellin and in London, 211.; loss, . In addition to the cost of 211., the sum of 155t, has been spent on capital unt.

ASIA MINOR SILVER LEAD.—J. W. H. Escherich, F. J. C. Munscheld: Report for April: District I—Main Adit Level: At the forebreast a cross-cut will be commenced, and thence a rise to Level i. The carthworks for laying a rannway to the incline leading to the new dressing-floors will be commenced by the middle of May.—Level 1. (Arthur): Two more places are prepared for work, quality fine. Value, 1½ ton per fathom.—Level 3 (Pitrie): Cross-cut: Lode cut on April 29, found unpromising, work stopped. New cross-cut commenced April 1; rock very hard, water increased, progress consequently slow.—Level 4 (Savalan): Total stopings, 2½ tons per fathom.—Level 5 (Durfeld): otal stopings, 3½ tons per fathom.—Level 6 (Geneses): Cross-cut No., about 50 it. from level's mouth, was commenced on the commenced early in June.—Level 9 (Michael): By cross-cut No. 2, about 55 it. west from No. 2, the lode was struck to the commenced and picked ore, 101: production of old dressing-floor, 134; total tons, 114½.—Surface Work: At Hadji Harous burrows preparations have been made for resuming work in May. In the valley the work in connection with the new dressing-floors, commenced April 17, considerable progress has been made, and foundations of buildings commenced. Should everything go right the machinery ought to be at work by October or November next. To-day (May 15) there are 112 hands there, against 55 lat amonth.—General Remarks: Owing to the Greek Easter and saints' holidays there were but 19 working days in April, against 27 in March. Total production, 14 tons, against 17s in March. Total production, 14 tons, against 17s in March. Total production, 14 tons, against 17s in March. Total production, 15 tons, against 17s in March. Total produ

CHILI GOLD.—The remittance for March of 708 ounces of gold has been gold by Messrs. Pixley and Abell, and realised 2631/. This gives a total of 1936 ounces sold by them for the first three mouths in the present year on account

othic company.

OEVALA-MOYAR GOLD.—Extracts from the report of the mine manager,
DEVALA-MOYAR GOLD.—Extracts from the report of the mine manager, of this company.

DEVALA-MOYAR GOLD.—Extracts from the report of the mine manager, dated May 7: Harewood Reef: We have relet this tunnel, and contractors made 2½ ft. last week.—Balomon's Reef: This week the main tunnel has only been driven 1 ft., the raise up has at last struck the winze coming down at a distance of 142 ft. from the main tannel. The winze and raise up met exactly, which was somewhat good luck, as the face of the rock outside both tunnels was so steep that 1 could not set a theodolite. There was some fine-looking quartz where the winze met the raise up, and I will at once put on 50 coolies and start raising stones, as I intend to get down 2000 tons or so before the monsoon sets in.—Strathearn Reef and Mill: We are progressing with the erection of the mill fairly, although declayed for timber, but I believe our present arrangement will bring all we require. The new tunnel tass struck the line of reef and met the drive going sooth alongside the reef, thus providing a good current of air. The new tunnel is 23 ft. long. The drive going north alongside the reef has been extended 17 ft. during the fortnight; very wide reef and good-looking quartz. We are starting a raise up at the junction of the tunnels to go up to the surface which will be necessary when we start blocking out, and it will at all times ensure good versit lation.

which will be necessary when we exact secting out, and at will at all times classify good ventilation.

EBERHARDT.—F. Drake: Statement of progress for week ending May 6: The 5000 ft. west, total distance, April 29, 1163 ft.; run for week ending May 6, 28 ft.; total distance, May 6, 1181 ft.; run for months of April and May, April, 59 ft.; May, 18 ft. Drift No. 1, total distance, April 29, 58 ft.; run for week ending May 6, 17 ft.; total distance, May 6, 18 ft.; run for months of April and May, April, 58 ft.; May, 18 ft. Drift No. 2, total distance, April 29, 60 ft.; run for week ending May 6, 2 ft.; total distance May 6, 2 ft.; run for week ending May 6, 9 ft.; total distance May 6, 16 ft.; run for months of April and May, April, 8 ft.; May, 8 ft.—Remarks: Our west driving shows no material change, the face being still in dark lime. Drift 1 has passed out of the soft

THE MINING JOURNAL.

| See Section 1. The section of the section o REBEAK SYAPAL BINDER — the most of the south drift from the 150 ft. a boart—hild Eagle: The ow body at the end of the south drift from the 150 ft. boart—hild Eagle: The ow body at the end of the south drift from the 150 ft. boart—hild Eagle: The ow body at the end of the south drift from the 150 ft. boart cannot be a south of th

there would be room for a very fair profit in mining it. If our 900 drift were only extended that far west. By Tuesday next we shall be able to make a report on just what we did for April. The directors have, perhaps, heard of the very extensive preparations which are now making for a grand National Mining Exposition, to be held in the City of Denver during the coming aummer. Great interest is being taken in this enterprise, and the mines of Gilpin County will be thoroughly represented by ore exhibits. I take it for granted that the board will wish to have their property here represented, and that the trifling expense which this will necessitate will be thought a good investment. I am making preparations to send down specimens of Quartz Hill Company's ore, which will, undoubtedly, make the best showing for the depth that can be made in Colorado. We have one specimen in particular, from our 1275 west workings, which is generally thought by those parties here who have seen it as one of the finest pieces of gold ore ever produced in Colorado. This piece will weigh about 250 lbs., and is an almost solid lump of copper pyrites and grey copper. It must be worth at least at the rate of \$200 per ton. It will be the best commentary on deep mining in Colorado that the Exhibition can show.

RHODES REEF.—Extracts from the report of the mines manager, dated May 7: I wired you vesterday the result of the clean-up at the mills; we took great care in testing the blanket and buddle sand both by assay and amalgamation. I have every hope of getting better results in future, as there is much more visible gold in the stone and the new buddle gear, which will be soon in place, will enable us to save more of the sulphides, and leave the pyrites in a cleaner state for treating in the furnace and Chilian pans. A week will complete the furnace. Our lime contractor failed to bring any lime for the last eight days, or the furnace would have been finished before. The Chilian mills are erected, and we will attach the amalgamators as soon as

will had last for in No. north lowest or adit

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will have to be crushed before we get to the good stone last broken. During the last fortnight No. 2 tunnel has been driven 11 ft.; total, 182 ft. No. 2 drive going north ditto 15 ft. Rise up on new reef 18 ft. We are starting a tunnel in the lowest level at the end of the tramway which leads to the mill. From this level of adit all the quartz from Rhodes Reef will in future be extracted as the ground igetting too heavy for stripping. This adit will be driven all along the reef, and when it is carried to a point under which No. 3 tunnel cut the reef it will be for the level of the tunnel. The reef lies flat, angle 30%, and this cepth will give us 100 ft. or more backs to stope out.

AICHMOND CONSOLIDATED.—The following cablegram was received this morning (May 30) from 471 tons of ore. Refinery, \$20,000.

AICHMOND CONSOLIDATED.—The following cablegram was received this morning (May 30) from 471 tons of ore. Refinery, \$20,000.

**S. Longley, foreman, May 8: I have to report the following advance, and the present condition of the dead work for the week ending May 8: The 300 exist over No. 11 chamber has been run 12 ft. in limestone. The 400 south-east drift over No. 11 chamber has been run 12 ft. in limestone. The 400 south-east drift over No. 11 chamber has been run 12 ft. in limestone. The 400 south-east drift over No. 11 chamber has been run 13 ft. in limestone. The 700 north drift from west drift at quartzite contact (flurieigh drill) has been run 14 ft. in limestone. The 700 north drift from winze under 13 chute has been run 15 ft. in limestone. The 700 north drift from west drift from west drift (Burleigh drill) has been run 14 ft. in stratified limestone. The 900 north drift from west drift (Burleigh drill) has been run 14 ft. in stratified limestone. The 900 north drift from west drift (Burleigh drill) has been run 16 ft. in limestone. The 900 north drift from west drift from west drift from west drift from contact (Burleigh drill) has been run 14 ft. in stratified limestone. The 900 north drift fr

incomble indications for ore. The 500 north-west drift from west drift (Burleigh drill) has been run 14 ft. in instantified limestons. The 900 north drift from quartizite (Burleigh drill) has been run 15 ft. in limestone. The 900 north drift from west drift (Burleigh drill) has been run 15 ft. in limestone. The 900 north drift from the wint (Burleigh drill) has been run 15 ft. in limestone. The 900 north drift from west drift from north drift (Burleigh drill) has been run 15 ft. in limestone. The 900 north drift from the bottom of No. 7 winse is in somewhat harder ground; progress this week is ft.; total 15 ft. from the winze. There is no improvement in ore soams in the west cross-cut from the winze. There is no improvement in ore soams in the west cross-cut in the 700 ft. level; the ore varies in size from a few mice of the 150 the 1

Total ...

NO SALE on June 13.

TOTALS AND AVERAGES
21 cwts. Produce. Price. Pe
Whole sale ... 1227 ... 7 ... £4 12 4 13

NO SALE on June 8 or 15.

COPPER ORES. Sampled May 17, and sold at Tabb's Hotel, Redruth, June 1. es. Tons. Price. | Mines. Tons.

Mines.	10	ms.	Frice.		Milies. John. Price.	
Mellanear		83	£4 12	0	West Wheal Tolgus 66 £7 17 6 ditto 53 8 2 0	i
ditto	***************************************	82	4 8	6	ditto 53 8 2 0)
ditto	*************	80	4 3	6	ditto)
ditto	************	75	3 18	0	West Wheal Seton 39 4 7 6	į
ditto	***********	74	4 0	0	ditto 11 4 6 6	ì
ditto	************	69	2 4	6)
ditto	***********	47	3 16	6	West Wheal Basset 9 4 10 6	à
					RODUCE.	
Mellanear.	510	£20	000 9	0 1	West Wh. Seton 54 £ 275 8 0	,
West Wh.	Tolgus 161	12	80 17	0	West Wh. Basset. 9 40 14 6	
	Average pi	rice per t	ton		Average produce 7%	
	Amor	int of me	onev		quantity of fine copper, 57 tons 10 cwts.	1
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CO	MPANIES	BY WI	I MOI	H	E ORES WERE PURCHASED.	1
	Names.				Tons. Amount.	
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Greni	fell and Son	8			4 57 4 0	
Nevill	. Druce, an	d Co	*******			1
Mason	n and Elkin	gton	******		42 331 16 0	1

	C	OI	TOT	T 15	0	RES.		
	0	01	TI	TI TP	-	Tr 10 13 .		
Sampled	May	17,	and	sold	at	Swansea,	May	30.

......£ 3,597 8 6

Mines. T	ons.	Pi	oduce.	P	rice.	,	Mines. Tons. Produce. Price.	
Arendal ore	99		51/4	£3	7	0	Caveira ore 87 61/4 £3 16	6
ditto	99		51/8	3	7	0	ditto 48 636 3 16	6
ditto	99		51/8	3	7	0	Berehaven 70 63/8 4 5	0
ditto	75		31/2	2	5	0	ditto 70 635 4 5	Õ
Arendal ore ditto ditto ditto reg.	2		24	15	0	0		0
Garonne ore	84		91/1	6	10	0		0
ditto	84		91/8	6	10	0	ditto 12 774 4 13	Ö
ditto	84		91/8	6	10	0	Skimmings 6 263/2 17 10	0
ditto	84		91/8	6	10	0	Copper pre. 5 27¼ 17 5 Cop, ashes. 4 576 3 0	000
Caveira ore	88		61/4	3	17	0		0
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				TO	FAL	PF	RODUCE.	
Arendal ore &	reg.	374	£1	193	14	01	Virneberg ore 21 £ 148 1	0
Garonne ore		336	2	184	0	0 1	Skimmings 6 105 0	0
Caveira ore		311	1	191	15	6	Copper precipit 5 86 5	000
Berehaven or	е	140		95	0	0	Copper ashes 4 12 0	0
Foundry ash	es	28		128	16	0	Skimmings	0
							ORES WERE PURCHASED.	
	Na	me	s.				Tons. Amount.	
P. Grei					*****	****	41 £ 344 1 0	
							770 3759 2 0	
Massa	and I	likin	neton				491/2 165 16 0	

1227

£ 5668 11 6

Original Correspondence.

INDIAN GOLD MINES.

INDIAN GOLD MINES.

SIR,—Holders of these shares have had their fair share of delay and disappointment, but I trust the movement begun this week is but the commencement of a continuous rise in values of shares. That this is likely seems probable from the following:—The Rhodes Reef return of 6 dwts. per ton on 150 tons surface quartz shows that there is gold in India in paying quantities, even had this not been already proved by the experience of the South East Wynaad Company, who have got 12½ dwts. per ton from crushing quartz obtained at a depth of 400 ft. There are strong buyers of South East Wynaad shares, who for several accounts past have taken up their shares, and, it is understood, are holding them for a much higher range of prices. The Stock Exchange is almost always wrong where any great movement is concerned, and the dealers now find themselves unable to deliver the stock they have so freely sold during the last six months—about the strongest position possible for those who believe in a rise. The Glenrock Company is understood to be having 5 tons of its ore treated in England, and the large rise this week looks very much as if the results were satisfactory. There are various other favourable features that I could enumerate, but these are enough for the present. Suffice it to say, that if once the proper treatment of the pyritous orces is decided on (quite irrespective of the free gold), we shall have such a rise in Indian gold mines as will astonish your readers. From my own knowledge one of the companies has 3 tons of tailings from a late crushing, which, though the free gold obtained was not satisfactory, gave, on assay, 16 ozs. per ton.

London, June 1.

BWLCH UNITED MINES.

BWLCH UNITED MINES.

SIR,- Numerous enquiries having been made as to the sales of this mine during the past seven months, 94 tons of ore have been sold, realising 1,127L; the returns of ore are now being made monthly, and the next sale of about 20 tons will take place on or about June 20.

W. BATTYE, Secretary.

THE AMERICAN TIN TRADE-STATISTICS OF TIN.

April 1, 1882.—Stock in all hands, New York, Boston, and Phi-

-	**	**	,,	into New	York	870	
	**	**	Australian,	**	,,	150	
	**	**	L. & F.	**	,	30	
	**	**	Banca and Bil	lliton		105 =	1,155
Consu	mption—D	uring	April			Tons	2,230 800
Afloat	to date,	Straits	and Malacca,	Feb., Mar	., and		1,430
		ts, per ditto	per sail			$^{1,325}_{25}$	1,350
771 - 4 - 7 -	t11 h	2				PPD .	0.000

noweer, been no particular pressure to quit holdings, our moderate stocks in all branches being well held by the trade, speculation having of late remained dormant.

PIG-TIN.—The month opened with an active demand from our consumers, which was supplied by our dealers under sharp competition at from 24½c. down to 24c.; while our importers, owing to high quotations from the producing countries, held floating parcels above buyers' views. Meanwhile, the London markets began to show great weakness, which, on the resumption of business there after the Easter holidays, increased to such an extent as to cause a regular panic among the smaller operators in Europe, followed by a rapid break in prices of from 10l. to 15l. per ton, and the failure of several operators who were unable to meet their engagements.

Our operators at first looked on calmly, but as prices receded on the other side so rapidly and violently as to allow tin to be drawn from Europe under a duty of 10 per cent., it became necessary to put down our prices to such an extent as to prevent our market being swamped with the apparently superabundant holdings of the London speculators. Thus we gradually receded to 22c., and during the height of the excitement 21½c. is reported to have been accepted for some floating parcels, which immediately after were re-sold at 22c., and even over.

During the last 10 days however, a strong recetion set in a prices.

the height of the excitement 214c, is reported to have been accepted for some floating parcels, which immediately after were re-sold at 22c., and even over.

During the last 10 days, however, a strong reaction set in; prices, which had fallen in London to 87l. 10s., recovered within three days to 101l., to break once more to 97l., at which we close to-day.

The question now arises, to what extent has the position of tin been changed in Europe and in the United States, with regard to supply and demand, to justify the late break of over 15 per cent. in value? As far as we have been able to ascertain, the higher prices ruling of late have caused but an insignificant increase of shipments; on the other hand, so far, consumption everywhere has rather increased than otherwise. At present reduced prices we are bound therefore to look favourably upon the position, unless further embarassments amongst speculative holders in Europe should once throw the market into renewed confusion.

On April 27 both Houses of Congress passed a Bill repealing the discriminating duty of 10 per cent. ad valorem on all Eastern produce, if imported from ports west of the Cape of Good Hope to the United States, to take effect on and after January 1, 1883, and the signature of the President is only needed for the Bill to become a law. Under its provision the stocks of tin, warehoused in any of the European ports, will enter free of duty, thus enabling our operators to supply themselves in those markets, which, for the time being, are the most favourable.

The Eastern markets have but slowly and reluctantly followed the fall in the West stocks in the producing countries having of late hear

The Eastern markets have but slowly and reluctantly followed the fall in the West, stocks in the producing countries having of late been materially reduced; Singapore dropped from \$34\frac{1}{2}\$ to \$30\frac{3}{2}\$, equal to 102\frac{1}{2}\$, cost and freight, or about 23c. per lb. laid down here; the shipments from the 18 traits to the United States having been only 450 tons, and 150 to Great Britain.

At the regular bi-monthly Billiton sale at Batavia, on April 25, the usual quantity of 13,000 piculs sold at an average of 67 fl. 56 per picul, equal to about 23c. per lb. delivered here.

Arrivals in New York and Boston, Jan. 1 to May 1:— 1882. 188 Straits and Malacca	SI.
Straits and Malacca Tons 1925 93	
	10
Australian 300 1	47
L. and F. and refined 85	80
Banca and Billiton 120	18
TotalTons 2430 25	55
Afloat on May 1:—	
Straits and Malacca Tons 1350 9	00
Billiton "	_
Total	
New York. EDWARD P. WHITE AND CO.	

PANORAMIC RAILWAY GUIDE.—The latest addition to the now well-known panoramic railway guides of Messrs. Benrose and Sons (Old Bailey and Derby) is the guide for the Great Northern Rail-way. Starting from King's Cross the traveller is supposed to pro-ceed along the line, which, with the stations, bridges, tunnels, and rivers crossing it forms the picture in the centre of the page, whilst the sides of the page are occupied with a description of the principal objects of historic interest, sacred edifices, towns, pleasure resorts, patural objects, engineering works roads it was capals for inviting natural objects, engineering works, roads, rivers, canals, &c., inviting the attention of passengers. The guide occupies 50 pages foolscap

size, and will afford entertaining reading for an entire journey. The distance from London of each station passed through is given, and the points where branch lines turn out or fall in are indicated in the diagram, and as the several branches and loop lines are dealt with as distinct railways, even the smallest confusion is entirely avoided. An excellent index makes the book complete.

COPPER MINING IN JAPAN.

Some seven years since the mineral resources of the island of Shikoku (Sikok) were examined and reported upon for the Japanese Government, in whose service he then was as a mining and metallurgical engineer, by Mr. R. J. Frecheville, H. M. Inspector of Mines for Cornwall, Devon, and adjacent counties, and he gave an interesting account of one of the mines he then visited in a paper recently read before the Royal Geological Society of Cornwall, and which has now been reprinted separately. He remarks that the archipelago called by us Japan, but by its inhabitants Dai-Nippon, consists of 3800 islands, of which the four principal ones are Yesso, Hondo, Kiusiu, and Shikoku. The latter, which has a superficies about equal to that of Wales, lies to the S.E. of the main island called Hondo, and is separated from it by a narrow sheet of water known as the inland sea. The rocks of which Shikoku is composed are amongst the most ancient to be found in the whole of the Mikado's empire, which geologically speaking is a very young country.

calbed Hondo, and is separated from it by a narrow sheet of water known as the inland sea. The rocks of which shikoku is composed are amongst the most ancient to be found in the whole of the Mikado's empire, which geologically speaking is a very young country. The Besshi copper mine which forms the subject of the paper is situated in the north-western part of the island, some 10 miles to the south of the port of Nihama. The road connecting the mine with this place for a distance of four miles is a tolerably fair one, and passes over a flat country covered with fertile rice fields, and supporting a numerous population; for the last six miles it is only practicable for foot passengers, and passing through gorges and over steep ascents, climbs continuously until the summit of the mountain, which is about 4250 ft. above sea level, is gained. The formation of the district in which the Besshi vein occurs consists of altered clay slates such as hornblende and mica schists, alternating with beds of quartzite, the whole intersected by large masses of greenstone and serpentine. Dislocation, faulting, and intense metamorphism, together with the absence of vegetation in the neighbourhood of the mine, gives the region a rugged and precipitous character.

The Besshi vein crops out on the southern side of the mountain a few hundred yards below its summit; mica schist forms both its foot and hanging wall. The course of the vein coincides with the trend, about N.W. and S.E. of the mountain range, and dips N.E. at an almost uniform angle of 50° from the horizontal; it varies from 1 to 10 ft. thick, averaging about 5 ft. The vein is mostly a solid mass of ore from wall to wall, consisting of an intimate mixture of copper and iron pyrites—the quality varies from low grade ore not worth working up to 23 per cent. of copper. The mine has been in constant operation for nearly 200 years, so that the extent of the workings is considerable. The deepest point attained was about 100 fms, perpendicular below deep adit, the water being lift

copper the blade of a knife dipped in it. Mr. Frecheville advised the precipitation of the copper by means of scrap iron, which process was at once adopted.

The ore having arrived at the surface is carefully picked over by hand, and about 20 tons were being sent to the kilns and furnaces further down the mountain. In this transportation every advantage is taken of the force of gravity; cars running on tramways with iron rails convey the ore to certain points, from which, by means of "chutes" made of stout planks about 18 in. square section inside, supported sometimes on the side of the mountain and sometimes on trestle-work, and in one case by the aid of a self-acting rope tramway, carrying straw bags holding from 200 to 300 lbs., the ore finally reaches its destination, and is charged into kilns about 5 ft. square and 4 ft. deep, the walls being rudely built of stone lined with clay, where it undergoes the process of roasting, the operation lasting from 20 to 30 days. The matte is produced in furnaces consisting of shallow oval depressions in the ground, lined with a mixture of clay and charcoal; their dimensions are, 2 ft. long, 1½ ft. wide, and 1 ft. 2 in. deep. There is a hood which serves as chimney, and the blast is supplied at the back through clay tuyères by means of a couple of blowing machines worked by hand. The roasted ore and charcoal are charged together with a little mica schist for flux. The slag flows continuously, and contains only a trace of copper. When the furnace is full of matte its surface is cleaned of slag and charcoal, and cooled by sprinkling cold water on it, the resulting crusts of matte being removed in discs with an iron bar. The matte, samples of which assayed 54 per cent. of copper, is broken up and run into coarse copper in similar furnaces, the only difference being that the tuyères are more inclined, and that a clay cover is moulded over the charge after it has been put in the hearth, an opening being left in front just sufficient to see and rake through. The metallic coppe tuyeres are more inclined, and that a clay cover is moulded over the charge after it has been put in the hearth, an opening being left in front just sufficient to see and rake through. The metallic copper front just sufficient to see and rake through. The metallic copper formed is removed in discs in the same manner as described for the matte, except that hot water is sprinkled over its surface to cool it. The capacity of one of these furnaces is about 4200 lbs. of ore per day. All the coarse copper produced is carried by coolies to the refining works at Tatskawa, situated at the base of the mountain on

the road to Nihama. The refining process consists in the fusion of the coarse copper, together with charcoal, under a highly inclined blast in furnaces of the same sort, but a little larger than those described before. The "rosette" copper produced is broken in pieces and melted in crucibles, with the addition of about 2 per cent of lead. A piece of oak charcoal is then inserted beneath the surface of the molten metal. After the lapse of two or three minutes this is withdrawn, and the contents of the crucible are poured into moulds under hot water. These moulds are made of wood, and have a strong hempen cloth stretched over them. Great care is taken to maintain the water at stretched over them. Great care is taken to maintain the water at a uniform temperature. The resulting tiles, or plates of dry copper, are 9 in., long 6 in. wide, and about \(\frac{1}{2}\) in. thick. They have a magnificent red colour, and in this state are sent to market. This copper commands a high price for electro-telegraphic purposes on account of its great purity. The total consumption of charcoal amounts to about 70 per cent. of the weight of the ore. At the time of Mr. Frecheville's visit 44\(\frac{2}{3}\) tons of refined copper per month were being produced by this mine at a total cost of \$60\(\frac{1}{2}\). Per ton delivered in the open treaty port of Kobe

open treaty port of Kobe

Mining Correspondence.

BRITISH MINES.

BRITISH MINES.

ALSTON UNITED.—C. Irving, June 1: I am glad to inform you that the mine is looking excellent as we proceed with the sinking of our shaft; the lode is increasing in size, and we are raising good stones of ore of I cwt. and upwards, and it is daily improving; this looks well for our next level. The ends in the present levels are the same as last reported—orey throughout.

BEDFORD UNITED.—H. Tredise, May 31: I beg leave to present you with the following report on the state and prospects of the mine.—North lode: flince the last meeting our operations have been confined to driving the 15 fms. level, which has produced copper ore and mundic occasionally to the value of 6f. per fathom. There is about 20 fms. more to drive at this level to intersect the slide over and under which the Marquis lode made magnificent deposits of ore, and this drivage will probably occupy 12 months, when we may hope to find something better than we have hitherto seen: 16 men and boys are working in the different levels on tribute, and are earning good wages, while we are rising a sufficient quantity of ore and mundic to defray expenses of present development.—Bridge lode: McCallan's engine-shaft has been sunk 12 fms. 3 ft. in the last half-year, the 30 west 29 fms. 3 ft. 3 in., the 20 cast 27 fms. 5 ft. 4 in., besides sinking an air-shaft 11 fms. 5 ft. 2 in., which has been communicated with the 20 west, and improved the ventilation, including a rise in the 20 cast, now suspended. Two winzes are being sunk in the 20 cast and west for two purposes—ventilation and proving the value of the lode. A tippiat has been cut at the 20 to good substantial tram road put in the same. Opened on the lode in sinking and drivages 159 fms. 2 ft. 5 in. The lode for the whole distance in the shaft will average 3 ft. wide, and is very promising, the character of the lode and stratum of ground being very fine, composed of a light blue slate, highly congenial, and producing good stones of high quality fere. The shaft is sunk the required depth, an

from the north lode 121 tons copper and 40 tons mundic. If the lode continues to productive as at present, and of which there is every indication, I hope to augment the returns. The machinery is in good order and working well, and I cannot but congratulate the shareholders on the improved position of the property generally, and which will in my opinion eventually lead to a profitable mannet to the property generally, and which will in my opinion eventually lead to a profitable in the rise above the 50, nor in the Blue Burrow shaft below the 40. The 40 cast end is improved, and is now worth \$E, per fathorn, and the 30 cast end 10!, per fathorn. The Gumpas adit west end is looking most promising, the lode being 125, the wind, and worth 15 cast will be 10 cas

nd.

ROOK BURN.—Jacob Craig, May 25: There is no change in the two
this week, but we are now nearly up to the point, where according sek, but we are now heatry up to the pane, where absorbing ond's survey we ought to cut the first east and west vein, vein, seen in the adjoining Metal Band Mine, and I trust before discovery. The following monthly bargains were let on level to four men for 89s. per fathom, and the east level to fe

at 72s, per fathom.

CWMYSPWIFH.—J. B. Rowse, May 31: The lode in the 3, west of Edwards's OWNYSTWIFE.—J. B. Rowse, May 31; The lote in the S., west of Edwards; winze, is 4 ft. wide, composed of clay-slate, lead, blende, and quarte; it is not quite so productive for lead and blende, notwithstanding the stuff pays for dressing. Gill's lower level, driving west of No. 2 winze, is in a lode 3/5 ft. wide, yielding 1/5 ton of blende per fathom. There is no change in any of our underground stopes since reported in last week. The stope in the Big Rock, which has yielded some good lead and blende, is communicated to old workings, consequently we shall in the course of a few days begin a stope on another part of the same lode, which shows some good lead. We are working regularly at the picking of the old burrows, but for want of sufficient water to work our crusher we shall have to store the orestuff until we get rain, when we hope to be able to catch up again.

ester up again.
D'ERESBY MOUNTAIN.—J. Roberts, W. Sandos, May 31: There is no ch the mine to notice since last week. The No. 6 end and the two ends at

In the mine to notice since last week. The No. 6 end and the two ends at No. 5 and the stones are all very much the same in appearance and value.

DEVON GREAT CONSOLS.—I Richards, June 1: Wheal Josish: In the 148, east of the Count-house shaft, on the new south lode, the lode is 5 ft. wide, of a very promising character, and yielding some good copper an i unndic ores.—Wheal Emma, Inclined Shaft: In the 137 east the lode is 3 ft. wide, and composed of capel, quartz, peach, mandic, and a little copper ore.—New Shaft, New Bouth Lode: In the 115 east the drivage is being carried by the side of the lode, and also in the 19) west, the drivages are being carried by the side of the lode, and also in the 19) west, the drivages are being carried by the side of the lode, and also in the 19) west, the drivages are being carried by the side of the lode, and also in the 19) west, the drivages are being carried by the side of the lode, and also in the 19 west, the drivages are being carried by the side of the lode, and also in the 19 west, the drivages are being carried by the side of the lode, and also in the 19 west, the drivages are being carried by the side of the lode, and also in the 19 west, the drivages are being carried by the side of the lode, and also in the 19 west, the drivages are being carried by the side of the lode, and also in the 19 west, the drivages are being carried, and in the lode is 1½ ft. wide, composed of capel, quartz, prian, mundic, and a little good quality copper ore. At the western shaft, having an increase of water, larger pitwork is required to keep the shaft drained, which is now prepared and will be fixed in the course of a few days, after which a plat will be cut and a little drained, which is now prepared and will be fixed in the course of a few days, after which a plat will be cut and a little drained, and a little drained.

DERWENT.—John Morpeth, May 20: Since the date of the last setting report potted a week ago we have no change in the mines worth noting—ferrice Shati, Middle Yein: the Seast upon this win is 4 it. with yein in 4 it. with well as the producing of the per fathom; No. 2 is 3 it. wiee, and worth 16 vest. The shat are yielding 16 vert, per coloi fathom; will hard and worth 16 vest. The shat are yielding 16 vert, per coloi fathom; will hard and worth 16 vest. The shat are yielding 16 vert, per coloi fathom; will hard any one of the producing 2 vert. So and display the per statem is the per statem in the pe

without exception, all those we have at work have earned good wages, and as our mise is not a deep one, and is most thoroughly ventilated, we expect to be able to get all the miners we may require readily. In our next report we shall be able to give particulars of the parcel of black tin we have now ready for sale, which we estimate at 15 tons.

EAST BIUE HILLS.—S. Bennetts, May 31: The lode in the adit east end is 1½ ft. wide, and worth fem. 1½. to 8½, per fathom. In the 40 east end it is 3 to 4 ft. wide, and worth from 1½. to 8½, per fathom. Since the dry weather has set in the supply of water for the stamps has considerably failen off, and at present is only just sufficient for six heads.

EAST BOTALLACK.—G. H. Eustice, J. Hollow, May 30: We are pleased to inform you that in sinking the engine-shat the ground is getting easier, and more congenial for the production of mineral; the character of the lode is also changing, and producing more tim. The lode in the 35 east is larger than it has been for some time, and letting out more water, which is a good indication; that in the 35 end east is without change.

EAST DARREN.—Thomas Garland, May 31: South Lode: In the 92 west the lode is 4 ft. wide, composed of blue killas, carbonate of lime, and small spots of lead ore. In the 80 west, on north part of lode, we have met with a cross-joint, sutting off the ore, which probably is heaved to the north, and are now driving in that direction. The branch of ore in No. 3, 80 level east, continues to maintain its average size and yield of 1 ton of lead ore per fathom. In the 68, west of Vaughan's winze, the lode losk kindly, and yields a small leader of lead on the footwall not sufficient to value. The stopes in the mine (four in number) are without change to notice. We have put in a new balance-bob on top of Taylor's shaft in the place of the old one delayed, and shall now make the necessary siterations to our drawing-machines and repair Taylor's shaft for the working of a wire rope. The dressing fore is being carried on

EAST WHEAL LOVELL.—R. Quentrall and Son, May 31: Engine Lode: The ode in the 48, driving east of engine-shaft, is lowking very well, and worth fully 44. per fathom. The lode in the 19, west of old engine-shaft, is worth from 65. o 75, per fathom.—Roger's Lode: The shaftmen have put in penthouse, and have commenced sinking the middle shaft below the 54, but have not yet taken lown the lode. The lode in the 54, east of middle shaft, and also in the winze below the loventy of the shaft, and also in the winze below the loventy of the shaft, and also in the winze below the loventy of the shaft, and also in the winze below the loventy of the shaft, and also in the winze shown the lode. The lode in the 54, east of middle shaft, and also in the winze below the level above, which is just before this end, is producing instant of the mine.

GAWLIN.—G. Bowe, G. Rowe, jun., May 27: The lode in the 117 east still continues its cheering character and appearance, being over 6 ft. wide, yielding 0 tons of mundic per fathom. The lode in the stope in the back of this level is worth 5 tons of mundic and ore per fathom. The lode in the 105 east is producing 10 tons of arsenical mundic per fathom, intermixed with good quality opper ore. The lode in the stope in the back of the 105 is worth 9 tons of nundic and ore per fathom. The lode in the 70 east of cross-cut is yielding tons of mundic per fathom. The lode in the rise and stope in the back of this evel is worth 7 tons of mundic per fathom. All our machinery is in good conlition, and working well.

GLASDIR ARGENT COPPER (Merioneth).—J. Parry, May 31: The stope (GLASDIR ARGENT COPPER (Merioneth).—J. Parry, May 31: The stope

see is worth 7 tons or manuse per issues.

Histon, and working well.

GLASDIR ARGEST COPPER (Merioneth). — J. Parry, May 31: The stop rest of No. 1 shaft has improved. The forebreast of No. 2 shaft is much thume as last week. We have completed the pass towards the western end of the nine. We shall be able to push on with the forebreast western stope. The is without alteration. The ore sent off this month is about 53 tons; some of

is without alteration. The ore sent off this month is about 53 tons; some of to fivery good quality.

GLENROY.—R. Rowe, May 30: The lode in the 108, driving north, is 7 ft. wide, composed of quartz and rock, and containing a small quantity of blende ind copper. The lode has an improving appearance as we drive north down a loce of the lode in the stope cast of shaft about 9 ft. long by 6 ft. deep, which coke exceedingly well, worth full 10 cwts. of lead and equally as much blende ber fathorn. We are hard at work, pushing on as fast possible.

GOODEVERE.—R. Knott, May 31: Setting Report: To drive west from Higher shaft, by two men, at 41, 101, per fathom. The lode in the present ends not so large as for some time past, producing a little tin. In the stope in ack of this level the lode is 3 ft. wide, producing good stampling work; set to our men, at 31, per fathom. To drive east of shaft, by two men, at 51, per athom; lode, 1 ft. wide, producing saving work for the stamps. To stope the soke of this level, by two men, at 24. los, per fathom; lode, 2 ft. wide, producing loge 2 ft. wide, producing loge

athom; lode, 1 ft. wide, producing saving work for the stamps. To stope the sack of this level, by two men, at 2.1 lbs, per fathom; lode, 2 ft. wide, producing sta.nping work. The work throughout the mine is progressing satisfactorily; shears are holsted, and we are getting on with all the other work, preparatory to sinking, as fast as possible.

GREAT HOLWAY.—W. T. Harris, June 1: Roskell's Shaft: The 110 level west has been extended 3½ ft., the lode consists of carbonate of lime of the same character and width as for some time past; much more would have been one at this point but the men have been employed at the 95 level, where they have sloped 4 fm. 3 ft., the lode, both in the back and bottom of the level, vielding fair quantities of lead, and at present producing 1 ton per fathom. This, with the 110 level, set to six men, the former, at 6t. per fathom, and the atter at 10f. per fathom. The 95 level north has been driven 3 fms. 1 ft.; the lode is easy for progress, and continues to yield well of lead ore; at present is worth 15 cart, per fathom, and promising for an improvement. The 30 level vest has been driven 1 fm. 4 ft. 6 in.; within the last few days a decided shange ooth in the ground and character of the lode has taken place through the intersection of a cross lode. The lode at present contains a nice mixture of each and blende, and water issues freely from the bottom of the driving; set to ix men at 10f. per fathom.—Level Engine-Shaft: The 30 level cast 2 fms. 4 ft. and been driven, the lode being 2 ft. wide, producing fairly of blende and occasional stones of lead ore: relet to six men at 11f. per ton.—North and South Lode: The north level has been extended 4 fms. 6 in., the lode averaging 2½ ft. wide, and containing good stones of lead, worth 10 cwt, per son. We are daily looking for an important improvement here, the character of the ground indicates most favourably: set to four men at 64. per fathom. The 60 level east haven driven 3 fms. 5 ft., the lode at present is slightly disordered, but co

and from the starting point about 30 fms. The foundation for the new engine is finished, and the leading for the new beam is nearly complete. Dressing geing on as usual.

GWYDYR AMALGAMATED.—J. Roberts, W. Sandoe, May 31: Clementina: There are still strong spots and faces of lead and blende in the 44 end. The sump at the 34 is not quite so good on one end, but we do not attach any importance to that, as it is common enough for the lode to squeeze a little and open again directly. The 25 end is looking a little better. There are two nice ribs of ore, one on each side of the end, which are coming together as we advance, and no doubt when they meet they will make a good lode.—Aberllyn: There is no change in the stopes or in the rise.

HERODSFOOT.—P. Temby, J. A. Temby, June 1: Setting Report: The shaftmen to continue the sinking of the engine-shaft below the 215, by six men, at 14, per fathom. The 215 to drive south, by six men, at 70s, per fathom; lode worth 10 cwts. of ore per fathom. This end is still opening up profitable ground. No. 1 stope in the back of this level, to four men, at 42s. 6d. per fathom; lode worth 14 cwts. of ore per fathom: No. 2 stope, in the back of same level, to four men, at 42s. 6d. per fathom. No. 3 stope, in the back of same level, to four men, at 32s. 6d. per fathom. No. 3 stope, in the back of same level, to four men, at 10s, per fathom; lode worth 15 cwts. of ore per fathom. No. 4 stope, in the back of same level, to two men, at 30s, per fathom; lode worth about 8 cwts. of ore per fathom. No. 3 winze, to sink in the bottom of the 205 south, to four men, at 10s, per fathom; lode worth 15 cwts. of ore per fathom. The 205 to drive north, by two men, at 10s, per fathom; lode worth to four men, at 42s. 6d. per fathom. No. 1 stope, in back of the 169 north, to four men, at 42s. for ore per fathom. No. 1 stope, in back of the 169 north, to four men, at 42s. for ore per fathom. The 150 cwts. of ore per fathom. No. 1 stope, in back of the lode is now men to open on a branch of the lode in t

have broken some good stones or rien silver-lead vie. The training as decided and 205 at 30s, per 100 skips. The filling throughout the mine at 12s, 6d, ser 100 skips. HINGSTON DOWN CONSOLS.—Thomas Richards, May 31: Fair progress is being made in sinking the engine-shaft below the 25 fm. level; the lode is now to the south of the shaft, and unless it should change its underlie it will not be seen again until the next intended level is reached, which will be accomplished with as little delay as possible. The lode in the 25 east of the shaft is composed if capel, quartz, mundic, &c., and in places stones of copper ore. In the deep tilt level, east of south cross-cut, the lode is without any important change. The ground in the cross-cut south of the No. 2 lode is tolerably favourable. The stope in the back of the 12 fm level, east of the engine-shaft, continues to produce about ½ ton of copper ore per fathom.

KIT HILL GREAT CONSOLS.—Isaac Richard, June 1: At the tunnel level the ground continues favourable for progress. In the north engine-shaft inking selow the \$2 fm. level the lode is \$2\forall ft. wide, and composed of quartz, capel, and small quantities of mundic, copper, and tin ores. In the \$2 fm. level west of capel, peach, wolfram, blende, mundic, and a little tin ore. In the \$2 fm. evel east of the north engine-shaft the lode is \$1\forall ft. wide, composed of capel, and quartz, with a little mundic, copper, and tin ores. At surface the erection of the machinery for working the rockedrilis at the tunnel level, as well as he building of the engine-house at the top of the hill, are progressing satisfactorily.

KIRK MICHAEL.—R. Rowe, May 30: We have not intersected any lode yet

ne totaling of the engine-moust at the 20.

KIBK MICHAEL.—R. Rowe, May 30: We have not intersected any lode yet neither of the cross-cuts at the 20. The south one is now driven 16 fms. sast, not the ground is bespanged with lead and blende. The north cross-cut is driven fms. east, and we are daily expecting to cut the lode.

LEAD ERA.—J. A. Ede, May 31: The ground is in every respect the same as escribed in my report of last week. I have set the end for the month for 30s. er yard.

lescribed in my report of last week. I have set the structure of the per yard.

LLANDEGLA.—H. Hotchkiss, May 31: In the 36 yard level, east of whimther, the lode in the end is well defined, and of fair size, being 1 ft. wide near the sole of the level, and 18 in, wide in the roof, embedded in dark mineral innestone. The 36, west of shaft, is in a strong sparry lode of 3 ft, 5 in, wide, with a little dark sticking upon the footwall of the lode. The lode throughout in this end is of a very promising character, and is now bearing slightly more to the west.

imestone. The 35, west of shaft, is in a strong sparry lode of 3 ft. 6 in, wide, with a little dark sticking upon the footwall of the lode. The lode throughout n this end is of a very promising character, and is now bearing slightly more to the west.

MARKE VALLEY.—Wm. George, Francis Renals, May 31: We beg to hand you the following report of our setting on Saturday last:—Salisbury shaft: To live the 90 west by four men at 51, per fathom. The lode here has been discovered during the past fortnight, but the branches are producing a little coper ore; the ground, as will be interred from the price, is very favourable, and we expect from indications to get a favourable change in the lode again shortly. We have set two stopes in the bottom of this level to four men in each: No. 1 at 34, 10s., yielding 2½ tons; and No. 2 at 44, yielding 2 tons of ore per fathom. No. 1 rise from back of this level to six men at 104; the lode is 1½ ft. wide, yielding for length 5 tons per fathom. This is now 10 fms. 3 ft. above the level, and we purpose after another month to commence driving from the same. No. 2 rise to six men at 164; the lode here also continues to yield, as last reported, it toms per fathom. This is now about 4 fathoms above the level. No. 1 stope in back to four men at 44; yielding two tons. No. 2 stope is suspended while a tull and some other timber is being put in for security. To stope back of 40 by four men at 44; yielding 2 tons per fathom. We have set six pitches to 13 men, at an average tribute of 12s. 64. in 14.—When Jenkin: The shaftmen having completed the bargain set last month, we have now set to sink the shaft 4 fms. below the adit, and cut ground for bearers and cistern, per bargain 45. Masons and carpenters are being urged on as fast as possible.

MELLANEAR.—John Gilbert, May 31: There is no change in the 30 cross-cut, driving south of Gundry's shaft, but the ground continues very congenial for the production of minerals. In the 70 cross-cut, north of the main lode, the ground is mixed with stones o

opper ore.

MONA CONSOLS.—T. Mitchell, June 1: The lode in the western part of the nine continues to present a very promising appearance, and the ground is also if a promising obtanzater. The mason is busy building the necessary load-ing for the engine, pumping wheel, &c., and other preparatory work is being

ing for the engine, pumping wheel, &c., and other preparatory work is being carried on.

MORFA DU.—T. Mitchell, May 30; Setting Report: We have let the following bargains for June:—The stopes at the 50, by six men the month to raise ore, at 15s, per ton. This place continues to look unich the same as for some time past. The pitch at the 48, by aix men, at 18s, per ton of bluestone ore. This pitch has improved lately. To drive the 35 south from the engine-shaft, by six men, at 56, per fathom. The lode here will yield about 3 tons of bluestone in a fathom, and the ground looks exceedingly kindly. To drive in the lode from the bottom of the winze at 16a shaft, by six men, at 56, per fathom. The lode here has greatly improved, and will yield at present 7 tons of ore per finding the bottom of the winze at 16a shaft, by six men, at 56, per fathom. The lode here has greatly improved, and will yield at present 7 tons of ore per finding the bottom of the winze at 16a shaft.

I the back of the 20 having been holed through to some old workings, we have June 1: The lode at 16a shaft continues to look well. No change at any point this week. We shall finish loading the vessel with bluestone to-morrow.

MOUNT CARBIS.—W. Tregay, G. Johns, June 1: The Great Flat lode in the 38, north of engine-shaft, is 3½ fms. wide, and will produce 25l. worth of tin

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level king apel, west cosed fm. capel ction il as satis-

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per cubic fathom. The south lode, in the 27 west end, is worth 10% per fathom. Our calciner has not yet been got ready, but we have commenced dressing that small portion of our produce which can be dealt with without being calcined, have sold 2 tons 3 qrs. 17 lbs. of black tin, at 53%, 17s. 6d. per ton, amounting to 110%, 5s., and 1.9 tons 2 cwts. of tinstuff, at an average price of 12%, 5s. per ton, for 12%, 15s.: together, 234%. On getting our calciner ready and completing our dressing arrangements we shall very greatly increase our returns.

NEW TRUMPET CONSOLS.—R. Quentrall and Son, June 1: Franchis Lode: The lode in the shaft is getting larger, and contains a little tin.—Wheal Vall's Lode: Tweethick shaft is looking very well, and the lode is yielding good tintuff of a very favourable character. We have commenced sinking a winze below the adit level west of this shaft, where the lode is producing tinstuff of excellent quality.

NEW WEST CARADON.—N. Richards, May 31: In driving the 38 cross-cut of Hallett's shaft we are intersecting veins and small branches, but nothing to value. The little north lode at this level, driving west of cross-course, is producing stones of ore—a promising looking lode. The lode in the rise in the back of the 42 will yield 1 ton of copper ore per fathom. Fair progress is being made in driving west of Hallett's cross-course on the caunter lode at the 55. No other shange to notice.

NEW WEST GOGINAN.—A. Francis, Juna 1: Grav's shaft is being south by the staff is being south by the staff

die "Still yield I ton of copper one per fathom. Tany progress in boug mane by any state of the control of the St. 20. Other stages to notice." XEW WEST GOOD LINEAR. A. Present, some the consider stage to notice. XEW WEST GOOD LINEAR. A. Present, some the control of the stage o

mundic and tin. As soon as the lode is taken down we shall proceed to rise to communicate with the shallow adit, and when done we shall be in a fine position for stoping the ground as well as for driving the deep adit west. Part of the water wheel purchased is delivered on the mine, and the remainder is to be forthwith.

TREVAUNANCE UNITED.—Wm. Vivian, June 1: We are pushing on the cross-cut at the 55 with all all speed, as I consider our prospects at this point are of more than an ordinary character. We shall have a parcel of tin ready for the market in a fortnight.

VAN CONSOLS AND GLYN.—James Roach, May 31: The 70 fm. level, weat of Murray's shaft, on north wall of lode, is the same in character as when last reported. From the appearances in bottom of the 60 I look forward to improvements as the level shall be extended west. Rise above this level is yielding 10 cwts, of lead per fathom. The rise above 50 west, on south part of lode, to meet with the lead in No. 1 stope is vigorously wrought. Level driving from No. 2 to intersect lead branches in No. 1 is very promising; a portion of the stuff is being sent to the dressing floors. In 50, weat of Gundry's, the lode is almost perpendicular, and, bearing west, magnetic, which is favourable for a change for the better. Stopes are about the same in produce as when last described. I forwarded the parcel of lead to the purchasers on Monday last.

WEST CARADON.—Stehands, May 31: Vivian's north iode, in back of the 50 cast of rise, will yield 1/5 ton of copper ore per fm. This lode in the rise in back of this level will yield 1/5 ton of copper ore per fm. This lode, west of ditto, will yield 1/5 ton of ore per im. A stope in back of the stope is favourable change. The lode in the stope in the stope in back of this level will yield a ton of copper ore per fm. The lode, west of main cross-course, after which the men took to drive the level west of main cross-course, after which the men took to drive the level west of main cross-course, after which the men to drive the s

sinking Norris's shaft; the strata is very congenial, the part of the lode carried producing a little tia. We have commenced cross-cutting the lode both east and west at the 32, which we hope to have done against June 9, which is the general meeting of shareholders, when shall report more fully respecting the lode.

WEST POLBREEN.—Wm. Vivian, June 1: The 30 fm. level driving west on the north lode, lode about 2 ft. wide, producing a little tin, but not to value. The 30 fm. level driving west on the south lode, there is every appearance of an improvement. We have put down a footway in the eastern part of the mine. I propose to put up a whim on this shaft.

WEST WHEALPEEVOR.—W. T. White, J. Pryor, June 1: Setting Report: The engine-shaft being set to sink below the 48 10 fms, certain bargain at 304, per fm.; there was no re-setting of this. The men are making very fair progress in progress. The 48 fm. level to drive west at 74. Per fathom; the lode in this end is greatly improved. A sample was assayed yesterday from the south part of the lode for about 2 ft. wide, and it made a produce of 1 cut. 0 qr. 18 lbs. to the ton. The whole width of the lode in the end is 3\frac{1}{2} ft., and we value it to be worth 204, per fathom; this is a good point. The main winze to sink in bottom to 48 fm. level at 54, per ton to be carried 12 ft. long; the lode worth 204, per fathom. This winze is going down east of the bunch of tin we have at this level. We are obliged to sink it at this point on account os drawing the staff with the little whim we have fixed at the 35, which is now working well. The lode in bottom of the 48, about 3 fms. west of this winze, is worth 704, per fathom and has a westerly dip. The stuff raising from here is of a very superior quality. We have three stopes working in back this level, the lode wortine and 104, per fathom; average price for stoping 24. 12s. per fathom. Cross-cut to drive north-west of Stranger's cross-course to cut the lode; certain back this level west of shaft the lode is within a slo

THE MINING JOURNAL

Area has been man and the label is fully 1.8. with 1, a very promising-locking one, the proteining beautiful goness with spar and stones of yolds corporate. In the control of the complete, when with a full pare of mon we hope to sink from 10.3 flows; when with a full pare of mon we hope to sink from 10.3 flows; when with a full pare of mon we hope to sink from 10.3 flows; when with a full pare of mon we hope to sink from 10.5 flows; when with a full pare of mon we hope to sink from 10.5 flows; when with a full pare of mon we hope to sink from 10.5 flows; when with a full pare of mon we hope to sink from 10.5 flows; when with a full pare of mon we hope to sink from 10.5 flows; when with a full pare of mon we hope to sink from 10.5 flows; when we have to sink from 10.5 flows; when the sink part of the sink of the sin

point of junction; it is important, therefore, that we should sink as quickly at possible.

WHEAL UNY.—W. Hambly, W. Prophet, J. White, June 1: We are urging on the sinking of Hind's engine-shaft below the 182 with all speed by 12 men. The lode in the shaft is large, producing a little tin, but not enough to value. The 182 end west is being pushed with all energy by six men, with the view of getting under the old sump shaft; the lode in the end is of a very promising character, and worth 64, per fathom for tin. In the 182 east we expect to drive 6 or 8 fms, further to reach the run of tin ground we are passing through in the level above. The lode in the present end has a very kindly appearance, and producing a little tin. The lode in the 172 end west is worth 181, per fathom. Two stopes is worth 184, per fathom. In the 172, driving east, the lode is 4 ft. wide, and worth 94, per fathom. A stope in the back of the above end is worth 124, per fathom. Old sump shaft is now down 6 fms, below the 172; the ground is easy for sinking, and in the last 6 ft. sunkt he lode has improved, and is now producing saving work for tin, 4 the other bargains are without change. All the new work at surface is pushed forward with all vigour.

BRYNARIAN MINE, CARDIGANSHIRE-SPECIAL REPORT.

BRYNARIAN MINE, CARDIGANSHIRE—SPECIAL REPORT.

May 27.—I beg to hand you a report of the work done at Joseph's level and Pensarn Mine.—Joseph's Level: We have laid rails and sleepers for 179 fms. in length in this level, which was commenced by former workers to cut the Brynarian lode, but was stopped before the object in view was reached, and have extended it 9½ fathoms on the course of Joseph's lode. At 3½ fms. from where we commenced we cut a cross branch, which disordered the lode and changed its course and underlie but the lode is now coming to its point again, and improves in width and character, and looks very promising for further improvement. If this lode continues to improve I believe, as the strong masteriy Brynarian lode is only about 10 fms. ahead, that when we reach the junction of these two lodes a good result will follow.—Pensarn Mine: We have cleared the leaf from the River Clettur to the Pensarn wheel, also cleared and timbered the new shaft, put new arms to the wheel, erected new pulley stands, and have bought 40 fms. of rods. I hope the machinery will be in working order in a few days to get out the water from this mine. By what I can gather from the men that last worked here there is very good blende and some lead there, and if there is lead similar to that lying on surface, I say that there is a good prospect before us.—John Davies.

From Mr. John B. Reynolds:—Probably there never was a time when bona fide mining operations were watched with greater interest than at the present moment. Capitalists find it most difficult to get safe channels for the investment of their money, and they do not allow it to remain in the Three per Cents, without great reluctance. Consequently they are not indisposed to look at any investment which offers a reasonable prospect of a good return. Whether any appreciable amount of money will be diverted into mining channels in the immediate future remains to be seen. Much will depend upon the action of managers of our first-rate mines. If committees will adhere to the ill-advised practice of heaping up debt then their mines will and ought to be shunned. No mines which do not anticipate their expenditure by providing for it in accordance with the Act of Parliament framed expressly to meet this obvious necessity as well as to correct other abuses in the old Cost-book System are extilted to confidence. That the public know how to estimate the importance of shares minimes which are worked strictly within the lines of the Act referred to is shown by the fact that whilst of late a large number of mining shares have been totally unsaleable, those companies which neither give nor take credit have received considerable favour. The most remarkable illustration of this which has some under our notice recently is to be found in the recent history of Wheal Coates Mine. The shareholders in that property were delighted beyond measure to find that on their four months' working, notwithstanding that the expenditure was about 600. per month, they only made a loss of about 60. This result, we have no hesitation in saying, would not have been achieved but for the exceptional and safe principle adopted by the management. It appears pretty clear that should the company be fortunate enough to make further discoveries in the direction of the West Kitty lode, or in any levels, this mine will quickly follow West Kitty lond the Dividend List.

BIRMINGHAM EDGE TOOLS.—A handsome sheet list of mining and other edge tools has just been issued by Mr. RICHARD THOMAS, of the Icknield Edge-tool Works, Birmingham. He explains that the sheet list is only intended to supplement his complete Book of Tools, but experience has taught him that buyers neither at home nor abroad will take the trouble to go through a large book containing a variety of articles, part of which they either know nothing whatever about or do not care for, consequently Mr. Thomas has selected a few of the leading tools only, which he has had specially engraved and he has taken particular care as regards the correct. engraved, and he has taken particular care as regards the correctness of the shapes of each. Being all on the same page the numbers are found without difficulty, and for the majority of the articles he has given the prices of several qualities. The list will prove of

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METAL MARKET-London, June 2, 1882 IRON. & s.d. & s.d. TIN. & d. & s. d.
Pig. GNB, f.o.b., Clyde... 2 7 4 — English, ingot, f.o.b., 101 0 0 —

Fig. 6MB, 1.0.0., Clyde & 7 4-	English, ingov, 1.0.0101
Scotch, all No. 1 2 8 0	, bars102 0 0
Bars, Welsh, f.o.b. Wales 5 10 0	refined103 0 0
in London, 6 0 0	Australian 98 0 0- 98 10
, Stafford., , 7 5 0- 7 15 0	Bancanom,
., in Tyne or Tees 6 5 0- 6 10 0	Straits 98 0 0- 98 10
. Swedish, London 9 10 0	COPPER.
Rails, Welsh, at works 5 10 0	
Bheets, Staff., in London 8 10 0	Tough cake and ingot. 71 10 0-72 0
Plates, ship, in London . 9 0 0	Best selected 73 10 0- 74 10
Hoops, Staff., 7 10 0- 7 12 6	Sheets and sheathing. 79 0 0-80 0
Nail rods, Staff., in Lon. 6 15 0	Flat Bottoms 82 0 0- 83 0
STEEL.	Wallaroo 73 0 0
English, spring 12 0 0-18 0 0	Burra, or P.C.C 72 0 0
,, cast30 0 0-45 0 0	Other brands nom. 66 0 0- 68 0
Swedish, keg15 0 0	Chili bars, g.o.b 68 10 0- 68 17
, fag. ham15 10 0	PHOSPHOR BRONZE.
LEAD.	Alloys I., II., III., and IV £125 0
English, pig, common14 7 6-14 12 6	VI. and VII 140 0
L.B14 15 0-15 0 0	XI., Spl. bearing metal 117 0
W.B15 2 6-15 5 0	
about and has 15 0 0 15 F 0	BRASS.
pipe	Wire 71/4d
	Tubes 914
	Sheets 8
material shot 17 to 5	Yel, met. sheath. & sheets 61/d61/4
patent shot17 10 0	
panish14 2 6-14 5 0	TIN-PLATES.* per box.
NICKEL.	Charcoal, 1st quality 1 1 0-1 2
Metal, per cwt15 0 0-16 0 0	2nd quality 0 18 0- 1 0
Ore, 10 per cent. per ton.20 0 0-25 0 0	Coke, 1st quality 0 17 0- 0 18
QUICKSILVER.	,, 2nd quality 0 15 6- 0 16
Flasks, 75 lbs., war 5 17 6	Black per ton 15 10 0
SPELTER.	Canada, Staff. or Gla. 12 0 9-
Blesian17 0 0-17 5 0	
English, Swapsea18 0 0- — Sheet zinc21 0 0- 22 0 0	Black Taggers, 450 of 2 30 0 0-
Sheet zinc21 0 0- 22 0 0	14 × 10
	less for ordinary: 10s per ton less for

• At the works, is. to is. 6d. per box less for ordinary; 10s, per ton less for Canada; IX 5s. per box more than IC quoted above, and add 6s. for each X. Tarne-plates 2s, per box below timplates of similar brands.

Remarks.—Our markets this week having opened with a quiet tone have, throughout the week, continued to be characterized with more or less inactivity in all branches. The commencement of the summer months, combined with the Whitsuntide holidays, may perhaps have caused rather more inanimation than there otherwise would have been, while the dulness may possibly have also been intensified by the uncertainty of political affairs in Egypt. But be this as it may, these matters taken individually have produced but little effect. It is merely in taking them in continuation that they may have formed some adverse influence, but yet it is worthy of note that their effect upon regular trade has been so small as to be scarcely appreciable. As we have on previous eccasions notified on legitimest trade have on previous eccasions notified on legitimest trade in the second. verse influence, but yet it is worthy of note that their effect upon regular trade has been so small as to be scarcely appreciable. As we have on previous occasions pointed out, legitimate trade just now is in a languid state, and it will doubtless require some considerable force to stir it from its lethargic condition, a force which will probably not be promoted by speculative operators. They can only be the means of, porhaps, enhancing prices, and that doubtless not permanently, because the natural result of an advance, not backed by bond fids trade, is to check the demand and to nip in the bud any little extra inquiry that may be beginning to spring up. It is true that there are some events which favour an augmented business, especially the stimulus of cheap money, and good agricultural prospects, but these are matters which can only produce an influence—it is true an important influence—yet at a time like the present, when consumers and shippers appear over supplied, they do not have that effect which they appear to possess on ordinary occasions, and while they bid well for the future, yet too sanguine views ought not to be anticipated as likely to arise therefrom. Time must be given for old supplies to have worked off; buyers cannot go on anticipating their future wants for any length of time. They have already done so to a large extent, and this cause coming as it does at a time when the general wants of the trade are limited, it is not surprising that business just now is slack, and shows no immediate it does at a time when the general wants of the trade are limited, it is not surprising that business just now is slack_hand shows no immediate prospect of reviving. It must not not not not not not infrequently sudden changes occur in our markets, and consequently a recovery in the trade might at any time speedily ensue, although this does not seem at the present time very likely; nevertheless here thave an insight, perhaps, into the causes to which the sundry changes which ever and anno occur in our markets are to be attributed; for instance, speculators anxious to buy at the lowest point of the market eagerly take advantage of any little turn in prices, hoping

thus to be the first in the field, and expecting thereby to realize increased profits. There have been some few changes during the past week in a few of the leading metals, but they have not been all in the same direction. There is nothing in general, therefore, which has had any material effect upon the markets, and what movements have taken place have been chiefly created by the action of speculative operators in the various metals. In one case prices shown symptoms of advancing, in another a receding, while in a third they have remained steady, clearly showing that what changes have been made have arisen from circumstances in connection with the individual markets, and not from any general event affecting the whole state of trade.

Corpus.—This market has been strong for Chili bars, and prices

mained steady, clearly showing that what charges have been made have arisen from circumstances in connection with the individual markets, and not from any general event affecting the whole state of trade.

Coppen.—This market has been strong for Chili bars, and prices have shown a progressive upward tendency and this has had an influence upon prices for other descriptions, although not sufficient to have any material alteration in quotations. As regards the amount of business that has been doing, it must be considered limited, although for the time of the year an average number of transactions have been carried through. The amount of business, however, that is now doing does not appear the chief support to the market, for it is open to question whether improved prices are warranted by that which is now being carried through. It is the improved statistics which makes holders so stiff in their quotations, and time alone can show whether they will be able to sustain prices for any very lengthened period. With regard to Chili bars, the charters from Chili were amounced at the early part of the week as 2500 tons (qr. 2900 tons), consisting of 1700 tons, bars and ingots, and 400 tons furnace material for England, and 400 tons of bars for the Continent. This somewhat heavy quantity may be attributed to the improved prices now ruling, and also to the light charters which have lately been advised. The present stock of Chilian produce, in Liverpool and Swansea, is estimated as 23,782 tons, a stock which shows some reduction when taken in comparison with that existing at the corresponding time of the few previous years; but then, although this is a very satisfactory feature, yet it does not therefore necessarily follow that from this cause alone prices must continue to further advance, for now they are very much higher than they have been at same dates on the few previous years. For instance, the value of Chili bars, on the Sits uit, was about 104. higher than they have been at same dates on the few previous years. For in

was recorded, what was transacted being done chiefly at 47s. 24d., at which there were sellers at the close, while buyers remained over at 47s. 2d. Yesterday the market was steady at 47s. 3d. and closes to-day at The shipments last week were 9760 tons, against 11,943 tons for the same week of last year, or a decrease of 2183 tons, which makes the total shipments for the whole of this year 250,110 tons against 211,835 tons for the same time in 1881, and 325,876 tons for the similar period of 1880. The number of furnaces in blast remains at 109, and the public stock has been increased by a further 458 tons, now amounting to 637,255 tons against 636,797 tons lastweek. The imports of Middlesbrough ppi iron into Grangemouth last week were only 2220 tons against 7970 tons for the same week of last year, or a decrease of 5750 tons, and which makes a total decrease for the whole of this year, compared with last, of 23,520 tons. The Middlesbrough market is reported as being rather quiet, although prices for the most part remain firm, while the tone has been slightly strengthened by a report that makers have sold some fairly large parcels to merchants at full rates. The stock in Messrs. Connal and Co.'s stores shows a further slight decrease for the week of 241 tons, while the price for No. 3 rules nominally at 43s. 3d. at which figure warrants are offering. The shipments of pigs last week were rather restricted, while the mannfactured trade has kept quiet with but little fresh demand. Prices, however, remain fairly steady at 77. 5s. for ship plates and 64. 10s. for bars and angles. According to the Wolverhampton report some fairly large sales of pigs have been made, and a few quotations are rather stronger. Barrow hematites are quoted from 40s., and all mine pigs rule from 67s. 6d. to 70s. In manufactured there is barely any change, except in sheets, which are somewhat dearer and in which there is said to be a full make. At Birmingham some of the works are said to have remained closed for greater part of the week on the

they show very fair deliveries for the month of May, thus testifying that notwithstanding the various changes which from time to time take place in this metal, yet the deliveries continue upon a fairly large scale. It is true the deliveries are not so good as they were in the previous month, being 1854 tons against 2053 tons; but yet they compare well with those for the same month of the two previous years, those in May, 1881, being 1710 tons, and in 1890, 1746 tons. The visible stock has also been reduced to 15,479 tons against 16,213 tons on the 30th of April last. The shipments from the Straits to London last month are estimated as only 50 tons, and from Australia 450 tons.

SPELTER.—Steady at 17t. to 17t. 5s. for ordinaries.

Lead.—Quiet at 14t. 2s. 6d. to 14t. 5s. for Spanish, and 14t. 7s. 6d. to 14t. 12s. 6d. for English.

STEEL.—Fairly active, and for the most part steady prices.

41. 12s. 6d. for English.

Steel.—Fairly active, and for the most part steady prices.

Tin Plates.—Very little demand, while prices show no particular

CULCKILVER.—The importers of Spanish have accepted 51. 17s. 6d. this concession has given rise to a very large business, and at the set they have refused to continue selling at the price.

GOLD AND SILVER—Messrs PixLey and Abell (June 1) write: The arrivals of gold during the week have been large, but the demand for Italy, Palis, and India, has been so strong that, with the exception of 69,000% in sovereigns, sent into the Bank, the whole of the balance has been purchased for abroad, together with 67,000% withdrawn from that establishment. We have received 785,600%, from New York, 20,310% from Lisbon, 30,000% from West Indies, 32,170% from East Indies, equal to 888,080%. The P. and O. steamer has taken 58,500% to Bombay. Silver bas been very steady since our last, and the price has been firm at \$2½d, per oz. standard; at this rate the amounts by the Pacific and

West India steamers were purchased for India. The arrivals comprise 35,00% from the Pacific; 28,00% from the West Indies, 37,700l. from New York, equal to 100,700l. The P. and 0, steamer has taken 41,500l. to Bombay from Venice, and the Kavenna. salling to-day, 111,000l. also to the East.

The Mining Share Market has shown greater activity this week, and a decidedly better feeling has prevailed, owing in a great measure to the improved state of the Metal Markets and the rise in the copper standards on Thursday. With few exceptions, however, no great changes have taken place at present in the prices of shares. The mines mostly dealt in have been Wheal Basset, Killiffeth, West Crebor, Parys Copper, Tincroft, East Pool, West Seton, South Crofty, West Kitty, Dolcoath, and a few others.

Tin has been in good demand and firmer, but no advance has yet taken place in the standards for ore in Cornwall. Blue Hills, 25s. to 30s.; Carn Brea, 15 to 16; Cook's Kitchen, 37 to 38; Dolcoath, 70 to 72½; East Blue Hills, 10s. to 12s. 6d.; East Lovell, ½ to 1½; Sast Pool, 53 to 55; New Kitty, 1½ to 2½; South Condurrow, 8 to 8½; South Crofty, 10 to 11; South Frances, 12 to 12½; Tincroft, 14½ to 15½; West Basset, 11 to 11½; West Frances, 10 to 10½; West Peevor, 11 to 12; West Phœnix, 17s. 6d. to 22s. 6d.; Wheal Agar, 14½ to 10, leaving off 9 to 9½. A considerable improvement has taken place in the mine. Wheal Grenville, 10 to 10½; Wheal Jane, 1 to 1½; Wheal Jewell, ¼ to ½; Wheal Kitty (St. Agnes), 1 to 1½; Wheal Peevor, 10 to 11; Wheal Uny, 3 to 3½. Polrose, ½ to ½; at the meeting the accounts showed a balance against the company of 868l. 11s. 7d., and a call of 2s. per share was made. It was resolved to sink the shaft to the 110 in the Margaret lode, and also a winze from the bottom of the 100, where the lode is the best seen in the mine.

Wheal Sisters, 1 to 1½; at the meeting, the accounts for four months was 6894l.; tin sold, 101 tons, 5496l.; this was less than expected, owing to the falling off in the lode at the 230 west of Wheal Mary engine-shaft. Killifreth have been largely dealt in, and leave off at 5½ to 6; the month's sale of tin realised 1329l. 17s. 11d. Drakewalls, ½ to ½; Goodevere, 1 to 1½; Kit Hill. ½ to ½; Neel Drakewalls, ½ to ½; Goodevere, 1 to 1½; Kit Hill. ½ to ½; Neel Drakewalls, ½ to ½; Goodev

in about a fortnight.

COPPER has been much firmer, and at the Cornish Ticketing, on Thursday, the standard for ore advanced 5l. 10s., the greatest rise known for a long time. The ore sold (734 tons) realised 3597l. 8s. 6d., or an average of 4l. 18s. per ton. The average produce was 7½ per cent.; standard, 97l. 13s. Bedford United, 1½ to 2; at the meeting, full particulars of which will be found in another column, the accounts to which we referred last week were adopted and passed.

cent.; standard, 97. 103. Beandw Critted, 1\footnote{13} to 2\footnote{13} the deceding full particulars of which will be found in another column, the accounts to which we referred last week were adopted and passed. Caraarvon Copper, \(^1_2\) to \(^2_2\); the sampling is 50 tons of rich ore. Devon Great Consols, 7\(^1_2\) to 7\(^2_2\); Devon Great United, \(^1_2\) to \(^3_2\); East Caradon, 5s. to 7s. 6d.; Gunnislake (Clitters), 2\(^1_2\) to 2\(^3_2\). West Crebor, 10s. to 12s. 6d.; the lode in the shaft continues of the same value. Marke Valley, 7s. 6d. to 12s. 6d. Mellanear, 4\(^1_2\) to 4\(^3_2\); the sale of ore (510 tons) realised 2000\(^1_2\). Morfa Du, \(^1_2\) to \(^3_2\); the lode in Ida shaft has improved to 7 tons per fm. New Cook's Kitchen, 6\(^3_2\) to 7\(^3_2\); New West Caradon, 2s. 6d. to 5s.

Parys Copper, 10s. to 12s. 6d., and have been in good request. Prince of Wales, 9s. to 11s.; West Caradon, 7s. 6d. to 10s.; West Seton, 18 to 20\(^1_2\); Mona, 4 to 5\(^1_2\) Mona Consols, 1 to 1\(^1_2\). Wheal Crebor, 3 to 3\(^1_2\); the sampling here is 396 tons of ore; other points in operation valued in the aggregate at 175\(^1_2\), per fathom. No. 1 winze, sinking below the 120, is worth 15\(^1_2\), per fathom. Devon Friendship, 4s. to 6s.; the new water-wheel for the second crusher is completed; the building of the house and flues for second calciner is in progress, and if ready the returns could be increased. Sortridge, 6s. to 7s.; mine looking well. South Caradon, 15 to 20\(^1_2\); South Caradon, 15 to 20\(^1_2\); South

is in progress, and if ready the returns could be increased. Sortridge, 6s. to 7s.; mine looking well. South Caradon, 15 to 20; South Crebor, \$\frac{3}{2}\$ to \$\frac{1}{2}\$; South Povon United, \$\frac{1}{2}\$ to \$\frac{3}{2}\$; Swest Devon, \$\frac{3}{2}\$ to \$\frac{1}{2}\$; South Povon United, \$\frac{1}{2}\$ to \$\frac{3}{2}\$; Great Laxey, 17 to 18; Roman Gravels, 9 to 9\$\frac{1}{2}\$; Tankerville Great Consols, 4s. to 6s.; Watson's shaft is nearly down to the 230; at Pennerley they are pushing on the erection of boring machinery. D'Eresby Mountain, 1 to 1\$\frac{1}{2}\$; East Roman Gravels, 15s. to 17s. 6d.; from appearance of 97 south an important improvement is daily expected here. Coedy-Fedw, 1 to 1\$\frac{1}{2}\$; Goddard's Lead, 1 to 1\$\frac{1}{2}\$; It adhills, 2\$\frac{1}{2}\$ to 2\$\frac{1}{2}\$; Pennant, 4\$\frac{1}{2}\$ to 5; Pen-yr-Orsedd, 10s. to 20s.; Sinclair, 1 to 1\$\frac{1}{2}\$; West Holway, 1 to 1\$\frac{1}{2}\$; West Lisburne, \$\frac{1}{2}\$ to 1\$\frac{1}{2}\$; Gwernymynydd, \$\frac{1}{2}\$ to 1

\$\frac{1}{2}\$ to 1.

Foreign Mines.—Akankoo, \$\frac{1}{2}\$ to \$\frac{3}{2}\$; Alamillos, \$1\frac{1}{2}\$ to \$1\frac{3}{2}\$; Anglo-African Diamond, \$7\frac{1}{2}\$ to 8; Broadway, pref., \$3\frac{1}{2}\$ to 4; Cape Copper, 54 to 55, and a considerable amount of business doing; the directors have declared a dividend of \$1\close \text{and}\$ a bonus of \$1\close \text{per share}\$, the latter payable on August 11. Chili Gold, \$\frac{1}{4}\$ to \$\frac{1}{2}\$; Colar, \$\frac{1}{2}\$ to \$\frac{3}{4}\$; Colar, \$\frac{1}{2}\$ to \$\frac{3}{4}\$; Eberhardt, \$\frac{3}{2}\$ to \$\frac{3}{2}\$; Fortuna, 4 to \$4\frac{1}{2}\$; Frontino and Bolivia, \$2\frac{1}{2}\$ to \$2\frac{3}{2}\$; Hoover Hill, \$\frac{1}{2}\$ to \$\frac{3}{2}\$; Indian Consolidated, 15-16th to \$1\$-16th; Indian Glenrock, \$1\frac{3}{2}\$ to \$1\frac{3}{2}\$; Indian Phenix, \$1\frac{3}{2}\$ to \$1\frac{3}{2}\$. Indian Trevelvan, \$\frac{3}{2}\$ to \$1\$; Kapanga Gold, \$\frac{3}{2}\$ to \$\frac{3}{2}\$; La Plata, \$1\frac{1}{2}\$ to \$1\$. 15-16th to 11-16th; Indian Glenrock, 1\(\frac{1}{2}\) to 1\(\frac{1}{2}\); Indian Phœnix, \(\frac{1}{2}\) to 1\(\frac{1}{2}\) main Trevelyan, \(\frac{3}{2}\) to 1\(\frac{1}{2}\); Kapanga Gold, \(\frac{1}{2}\) to \(\frac{1}{2}\); La Plata, 1\(\frac{1}{2}\) to 2\(\frac{1}{2}\), X.d.; Linares, 4\(\frac{1}{2}\) to 1\(\frac{1}{2}\); Potosi, \(\frac{1}{2}\) to 8\(\frac{1}{2}\); Placerville, 1 to 1\(\frac{1}{2}\); Potosi, \(\frac{1}{2}\) to 8\(\frac{1}{2}\); Placerville, 1 to 1\(\frac{1}{2}\); Potosi, \(\frac{1}{2}\) to 2\(\frac{1}{2}\); Rhodes Reef, \(\frac{1}{2}\) to 1\(\frac{1}{2}\); South-East Wynaad, \(\frac{1}{2}\) to 2\(\frac{1}{2}\); South-East Wynaad, \(\frac{1}{2}\) to 2\(\frac{1}{2}\); There has been quite a mania for these shares throughout the week. Tambracherry, 1 to 1\(\frac{1}{2}\); Thrasis, 41\(\frac{1}{2}\) to 4\(\frac{1}{2}\); Wentworth, \(\frac{1}{2}\) to \(\frac{1}{2}\); Prazilian Gold, 1 to 1\(\frac{1}{2}\); Gold Hill, 1 to 1\(\frac{1}{2}\); Birdseye, 1\(\frac{1}{2}\) to 1\(\frac{1}{2}\); Kapanga, \(\frac{1}{2}\) to \(\frac{1}{2}\); Michipicoten, 1 to 1\(\frac{1}{2}\); Yuba, par to \(\frac{1}{2}\) prem. These shares were erroneously quoted par to 1 prem. last week; it should have been par to \(\frac{1}{2}\) prem.

some of the works there is reported a very fair amount of business doing in plates and bars, although at some of the establishments its said that work is rather short. The trade in Wales is still stated as being in a tolerably good condition, the works continuing for the most part to be tolerably good condition, the works continuing for the most part to be tolerably good condition, the works continuing for the most part to be tolerably good condition, the works continuing for the most should have been part to ½ prem. New Quebrada, 4½ to 4½; Ruby 2½ to 3; Richmond, 8 to 8½. The accounts just published show a net profit on the year of 95,916l. 13s. 11d. out of which and the last year's credit balance of 149,351l 2s. 5d., the directors have carried 25,000l, to reserve fund, making it 75,000l., have paid five dividends, amounting to 162,000l. 10,914l. 18s. extraordinary expenses at Eurka, in connection with the defence of the mine, 1000l. for water rights, 20,000l. in settlement of suits with the Eureka Company, leaving a balance to the credit of revenue account of 26,352l. 18s. 4d. St. John del Rey. 170 to 180; Colorado, 1½ to 1½; Bratsberg, 1½ to 1½; to 1

much interfered with by the holidays; yet, a fair amount of business has been transacted, and in Indian mine shares there has been great activity. The rise of 51. 10s. in the copper standard in Cornwall—which means that the miners received 9s. per ton more for their tree than the control of wall—which means that the miners received 9s. per ton more for their ore than the same ore would have fetched at the previous sale—will have a highly favourable influence upon copper mine shares generally, and the difference in price would suffice to replace many concerns in dividend paying condition. The Cape Copper Company has declared a dividend and bonus, equal together to 2l. per share, which raised the annual interest to about 71½ per cent. per annum The Copiapo Company has declared a dividend of 1s. per share. The market closes with a better feeling than has been observable for many weeks past. many weeks past.

Our usual telegram from Cornwall this evening states: past week the Cornish Mine Share Market has been steady. The Dutch sale of tin went off satisfactorily. Straits is firmer. In London deliveries are good, and the statistics for the month show a reduction of over 700 tons. At Bedruth, yesterday, 734 tons of copper ore realised 3597l., the standard having advanced 5l. 5s. At a meeting of Wheal Sisters adventurers the accounts for four months showed a loss of 1254l., and a call of 5s. per share was made In the share market Wheal Bassets and Killifreths show a further advance; and Dolcoaths, Cook's Kitchen, and New Cook's Kitchen are strong. Carn Brea, 14\frac{3}{4} to 15\frac{1}{2}; Cook's Kitchen, 38 to 39; Doicap cha Bri and of

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coath, 71 to 72; East Pool, 53½ to 54; Killifreth, 5½ to 6; New Cook's Kitchen, 7 to 7½; North Busy, ½ to ½; Pedn-an-drea, 3½ to 3½; South Frances, 12½ to 13; West Basset, 11 to 11½; West Peevor, 12 to 12½; West Seton, 18 to 19; Agar, 14½ to 15½; Wheal Basset, 9½ to 10; Wheal Peevor, 10 to 10½.

In Indian Gold Mine Shares the revival has been very marked, and the opinion now seems general that the period of suspense is passed, and that one of prosperity is now dawning. The South East Wynaad shares have been in great demand throughout the week, and leave off 3½, 4½, so that they have really doubled in value in eight days—some must have made enormous profits. On Thursday the Indian Phœnix Company received a very satisfactory telegram from Mr. Grove, their manager, and the consequence has been a rise in the shares. The telegram says: "Have been working 10 heads of stamps for three days, half speed: shall have to stop for some days to re-adjust machinery. Turbine-water supply insufficient, but anticipate no interruption; are working from the reefs; crushed 8 tons, estimate 10 to 15 dwts. ton, free gold, independent of pyrites." This has naturally caused a demand for Indian Consolidated, Indian Glenrock (which includes South Indian, and will have 20 heads of stamps at work in a month), and Indian Trevelyan, which have all the same reefs, and prices generally are higher. A steady return at the above rate would place the mines in a satisfactory and prosperous condition. The reports from Devala, Moyar, and Rhodes Reef are also encouraging, but these properties are somewhat further from the reef which has yielded the 8 tons referred to.

The British Indian Electric Light and Power Company, with.

somewhat further from the reef which has yielded the 8 tons referred to.

The British Indian Electric Light and Power Company, with a capital of 250,000l., in shares of 5l. each, has been formed to purchase for 50,000l., half in cash and half in stares, the rights for British India to use the patents and systems of the Electric Light and Power Generator Company. The company has also the option of purchasing for 25,000l. the Indian rights in an accumulator or storage battery. The parent company "undertake the supply to this company, on very favourable terms, of all the Weston, Rapien, Lontin, and Maxim machines, lamps, &c., and the further rights to any future improvements therein. Also the right to manufacture in England, for use or sale in India, and without further payments, either in the shape of royalty or otherwise, all lamps, machines, and appliances appertaining to the company's business." The prospectus adds that the dynamo-machines and lamps mentioned above have all been thoroughly and commercially tested, and it has been shown that for durability, economy, and effectiveness they are not surpassed by any existing similar inventions. At the late Exhibition in Paris the gold medal was awarded to the Maxim and Lontin systems, and a silver medal to the Weston system. The merit of the Maxim lamp lies in the large amount of light it gives relative economy. These lamps can be used to produce the leight of 50 or even 100 candles each, and at the rate of six lamps will give an auggeogate of 300 to 600 candles per horse-power, the light at the same time being soft and pleasant. The great drawback of incandescent lighting has hitherto been the rapid destruction of the lamps. This is now overcome by the Maxim system. The British Indian Electric Light and Power Company is brought forward under excellent auspices, and has a large field for successfu operation.

The Self-Generating Electric Light and Power Company, with a

operation.

The Self-Generating Electric Light and Power Company, with a capital of 300,000l., in shares of 1l. each, has been formed to purchase for 120,000l. (two-thirds in cash and one-third in shares)

The Self-Generating Electric Light and Power Company, with a capital of 300,000%. (two-thirds in cash and one-third in shares) are capital of 300,000%. (two-thirds in cash and one-third in shares) simons' patents which are to be obtained. The light and system being equally unknown, nothing can be said concerning it, but the prospectus state that it is claimed that the Self-Generating Electric Light has the advantage of simplicity, brilliancy, steadiness, and economy. The lamp the state that it is claimed that the Self-Generating Electric Light has the advantage of simplicity, brilliancy, steadiness, and economy. The lamp contens and the intensity of the light is so saily regulated that the advantages cannot be over-estimated. Intending investors can satisfy themselves upon these points by an inspection of the light, which may be seen at the company's offices, and at the Royal Exchange, Leeds. The Simons' incandescent lamp elams superiority over every other in repeate continuous and warring the cost of complete sets of electrical apparatus, wires, and lamps will be much less than the cost of meter, pipes, and fittings for gas, and the annual saving for equal candle power will be from 40 to 59 ero ent. In favour of electricity. A capital of 400,000, in shares of 54, each, has been formed to purchase for 130,0001. (70,0001. in cash and the rest in shares) the eligible power will be from 40 to 59 ero ent. In favour of electricity. A capital of 400,000, in shares of 54, each, has been formed to purchase for 130,0001. (70,0001. in cash and the rest in shares) the eligible power of the capital sighting companies have realised large profits, as shown by the premiums at which such shares are now assauces and in obtaining one-half of the capital sighting companies have realised large profits, as shown by the premium at which such shares are found, and state of the Angle-American Breath Company, the 12 pad-up shares of which stand at about 401, per share remained to the profit of the capital sighting companies have realis

West Wheal Seton 19 to 21 (2400 shares), and are in great demand. The lode in the shaft is opening out a rich course of tin, and the 204 fathom level east is worth 40*l*. to 50*l*. per fathom, with

and the 204 fathom level cast is worth 40t. to 50t. per fathom, with more lode standing by the side of the level.

Carn Camborne, I to 1½, and are reported to have been in request in consequence of a further improvement in the 105 east.

Cape Copper, 5½ to 55; the directors at their meeting on Wednescay declared a dividend of 1t. per share, payable on June 24, and further resolved to distribute a bonus of 1t. per share, payable on Aug. 11. This raised the dividends for 1881 to 1½ per cent. per annum. The shares have been largely dealt in during the week.

Richmond, 8 to 8½; the usual telegram from the mines states that the week's run was \$31,000 from 477 tons of ore with one furnace.

During the week the refinery produced doré bars to the value of

During the week the refinery produced doré bars to the value of \$20,000. The superintendent's report (May 8) states that the 4001 south-east drift from east drift has been run 21 ft. in limestone, ore favourable for ore and progress in drifting. The 600 east drift under 12 amber has been run 4 ft. in very hard limestone. The 700 north drift from sit drift at quartizite contact (Burleigh drill) has been run 16 ft. in limestone. The 700 north drift from sit drift at quartizite contact (Burleigh drill) has been run 14 ft. in limestone. The 700 north drift from winze under 13 chute has been run 13 ft. in leastone and soft iron, favourable indications for ore. The report of the setting of shareholders held on Thursday will be found in another column.

Ruby and Dunderberg, $2\frac{1}{2}$ to 3; the report this week advises fair progress in the drifts and levels, though some are passing through ground somewhat harder; No. 8 ore body, above the 700 ft. level is described as of better quality than any before extracted from this place. The weekly telegram advises another shipment of 100 tons of ore, and news will doubtless soon come to hand of the value realised for the parcel. Work is also progressing satisfactorily at the Bullwhacker and Lord Byron.

La Plata, $1\frac{1}{6}$ to $2\frac{1}{6}$; the smelting statement for the week ending May 27 states that the ore purchased was 1108 tons, ditto smelted 842 tons, the production being 14,350 ozs. of silver, and 119 tons of lead, the whole of which was consigned to the refiners, the consignment being \$26,000, or 54161. On May 3 the Democrat reporter visited the works, and writes that he found all the furnaces in full blast, and everything running smoothly and with regularity, and bullion being turned out as fast as possible. The ore bins were full of ore, and all classes of minerals were being treated. A large portion of the ore is that from the mine of the company located in California guich. The principal improvement that has been made to the works is the addition of a large smelting furnace of rot the treatment of the fine dust, a very large amount of which accumulates in the brickwork receptacles built in connection with the stacks. When these chambers are cleaned out the material that has accumulated is saved and treated in the reverberatory melting-furnaces referred to above. When the fusion is complete the moliten material is removed by a rabbler into slag pots and allowed to cool off. When cold the mass is broken up and is again treated in the furnace with the other ores. This substance is very valuable as a flux, and carries about 20 per cent. In lead and about 40 ozs. in silver.

Yuba River, par to $\frac{1}{2}$ prem.; the particulars of the last clean-up have been received, and it appears that the return was at the rate o

partly due to the large interest they have in the rich gold and silver mines now being carried on by the Souback and Catir Alan Mining Company. These mines are now being vigorously worked, and a second shipment of ore has been received by Messrs. Bramley, Moor, and Co., the company's agents at Liverpool. The ore from these mines is very rich, being valued at from 161. to 27001. per ton, the minimum yield being richer than any mine at present in operation. The mines have also the advantage that they are all above ground, and the mineral in view sufficient to last for many years. The property consists of about 10,000 acres, and is sufficiently large to allow of its being divided into ten companies. The first offshoot, we hear, is likely to be launched at an early date, when the shares and bonds of the parent company are considered likely to attract still more the attention of capitalists. A meeting has been called, which is to take place on June 21. for the purpose of authorising the directors to dispose of the Catir Alan portion of the company's property upon such terms as the directors may think advisable, and that, for the purpose of enabling the sale to be completed, the directors be authorised to pay off immediately the debentures with a bonus of 50 per cent., or 151. for each 101. subscribed, and to divide the remaining portion of the purchase-money between the shareholders as a bonus. To prevent any misunderstanding the directors state that the sale of this portion of the process of the carried of the purchase-money between the shareholders as a bonus. To prevent any misunderstanding the directors state that the sale of this portion of the property will not in any way affect the working of the Souback property at present being worked, and from which shipments have been made and sold through the company's agents, Mesars. J. Bramley Moore and Co.

Rhodes Reef, Is to Ig;; the report of the directors prepared for presentation at the meeting on June 12, states that the profit and loss account shows a credit bal

In Lead Mine shares there has been decidedly more animation, owing to the general feeling that better prices for lead ore will be obtained—an opinion which is certainly supported by the fact that the metal is already 5s. per ton. It is reported that Tamar shares are steady at 1½ to 1½; indications are favourable for cutting into the South Tamer lode in rising to meet the new shaft. Carnarvon shire Great Consols, 1½ to 1½; these are firmer in consequence of the increased output of lead.

The standard of copper ore was, writes a local correspondent, put up at the Cornish Ticketing, on Thursday, about 5l per ton, and it may be observed that one firm of copper smelters bought nearly the whole lot offered—about 700 tons. A great rise in price of Cornish copper ores is expected shortly, as the metal is advanced. This is good news for such mines as Devon Great Consols, Mellanear, South Caradon, Gunnislake (Clitters), South Devon United, &c., selling large quantities of copper ore.

large quantities of copper ore.

It is notified that the scrip certificates of the New York, Texas, and Mexican Railway are now ready for delivery in exchange for the bankers' receipts at the company's offices, 33, Cornhill, London,

May 30, 1882.
The letters of allotment to the applicants for shares in the Phœnix Electric Light and Power Company were posted on Thursday.

At Swansea Ticketing, on Tuesday, 1227 tons of ore of 7 average produce, and containing 85 tons 34 cwts. of fine copper, were sold for 56681. 11s. 6d., being 4l. 12s. 4d. per ton of ore, 13s. 34d. per unit, or 66l. 10s. 11d. per ton of fine copper in the ore, and an average standard of 92l. 17s. 2d. for 9 per cent. produce. Subjoined are the particulars

41. 8s. 9d., and in the price per ton of ore about 6s. 3d. The Arendal ore of 4 15-16 average produce realised 12s. 11\forall d. per unit; Garonne, produce 9\forall per unit 14s. 3d.; Caveira, produce 6\forall per unit 12s. 2\forall d. Berehaven, produce 6\forall per unit 13s. 4d. There will be no sale on 1 upo 13.

At Redruth Ticketing, on Thursday, 734 tons of ore, of 72 average At Redruth Ticketing, on Thursday, 734 tons of ore, of 7½ average produce, and containing 57 tons 10 cwts. of fine copper, were sold for 3597l. 8s. 6d., being 4l. 18s. per ton of ore, 12s. 6d. per unit, or 62l. 11s. per ton of fine copper in the ore, and an average standard of 97l. 13s. Subjoined are the particulars of the two last sales:—Date. Tons. Standard. Produce. Per ton. Per unit. Or copper. May 18... 2001 ... £103 16 0..... 5½ £2 18 6 10s. 8½ d..... £53 10 0 June 1... 734 ... 97 13 0 7½ 4 18 0 12 6 £2 10 0 Compared with the last sale, the advance has been in the standard 5l. 10s., and in price per ton of ore about 9s. The sales and amounts realised were:—Mellanear, 510 tons for 2000l. 9s.; West Wheal Tolgus, 161 tons for 1280l. 17s.; West Wheal Seton, 54 tons for 275l. 8s.; and West Wheal Basset, 9 tons for 40l. 14s. 6d.

GAS SHARES.—The principal business in these shares, according to this evening's report of Messrs. W. L. Webb and Co., of the Stock Exchange and Finch-lane, has been—Continental Union, 25% to 25%; Cagliari Gas and Water (Limited), 21% to 22; Continental, New, 17%; European (Limited), 19; ditto, New, 9; Gas Light and Coke, A (ordinary), 169% to 171½; ditto, B, 4 per cent. max, 78; ditto, D, 10 per cent. pref., 211; ditto, H, 7 per cent. max, 126 to 127; ditto, 4 per cent. deb. stock, 103½; Imperial Continental, 185½ to 185½; Oriental (Limited), 63½; ditto, New, 31½; ditto New, 1879, 1½; Rio de Janeiro (Limited), 63½; ditto, New, 51½; ditto New, 1879, 13½; Rio de Janeiro (Limited), 25½ to 25½; South Metropolitan, A, 197 to 167%. Gas stocks very idle.

INSURANCE SHARES have, according to this evening's report of

Gas stocks very ide.

INSURANCE SHARES have, according to this evening's report of Messrs. W. L. Webb and Co., of the Stock Exchange and Finch-lane, been dealt in as follows:—Alliance British and Foreign, 6% to 6%; city of London Fire (Limited), 15% to 11½; Commercial Union, 21½ to 22½; Employers' Liability Assurance Cyrporation (Limited), 3½; to 3½; Fire Insurance Association (Limited), 3½; Liverpool, London, and Globe (II. annuity), 23½; London and Provincial Marine (Limited), 4½; North British and Mercantile, 59. Insurances dull, and little doing, TRAMWAYS.—The closing prices of this evening, as quoted by Mr. W. Abbott, of Tokenhouse-yard, are given in tabular form in the last page of the Journal.

RAILWAY AND GENERAL, MARKETS.

the Journal.

RAILWAY AND GENERAL MARKETS.—Referring to the course of business done to-day during official hours (11 to 3) Mr. Ferdinand R. Kirk, Birchin-lane, writes:—Openung: Eager buyers of Unified up to the very last yesterday at 7.1% are accepting 70% this morning. Spanish are strong at 2%, other bonds mostly lower. Turks are offered at 12%. Indian mining shares continue

to be bid for. South-East Wynaads are again over 3l., and being 1l. paid only it is thought something tangible will soon be announced. Indian Consolidated has just four times the capital, nevertheless the shares at ½ to 1 are well thought of in several quarters. Phonix, 1¾ to 1½; Rhodes Reef, ¾ to 1; Glenrock, 1¾ to 1½. American railway shares left off at the very highest last night, under the impression that higher prices were coming from New York; but instead they are lower, and a general fall has ensued. Readings can be bought at \$25%, and Eries at \$35%; Wheal Orebor, 2% to 5½; West Crebor, 10s. to 12s. 5d.; Mona, 3½ to 4; Van, 5 to 5½; Frince of Wales, ¾ to ½.—Closing: In railways a considerable fall has taken place in Great Westerns—not less than ½. Brighton, A, and Dover, A, are each ½ higher. Hammend, 12½ to 13½; Brush, 21½, to 2½; Panulcille, 5½ to 5½.

EUREKA NEVADA SILVER.—Considerable improvement has taken place in this company's mines, this week's report being much more satisfactory. One or two seams of fair grade ore have been encountered and are now being followed up; the mine has also been able to make a small shipment of ore to the furnaces.

to make a small shipment of ore to the furnaces.

Bratsberg.—Advices just received state that these mines continue to look exceedingly well, and the dressing of ore is proceeding satisfactorily. The cargo of copper we lately advised is ready, and a good deal also towards a further lot, for which another ship is chartered. At Swansea, on Tuesday, 7 per cent. ore fetched 13s. 3d. per unit, and as Bratsberg ores average above 20 per cent., the price will be proportionately higher. The Cape Copper Company have just paid a dividend and bonus, equal together to 40,000l., and the shares have risen to 55l. (7l. paid), making the market value above a million.

DEVON FRIENDSHIP.—The new wheel for second calciner is com-pleted, and if the latter was ready they could at once considerably increase the returns. The building of the house and flues for this other calciner are being pushed on.

ANDERTON TIN (Tavistock).—We understand that this mine has been formed into a Cost-book company, under the Stannaries Act, 1869. The extraordinary success which has lately attended the working of the property in the hands of its private owners, reported in our columns from time to time, has induced them to take this step, with a view to the erection of pumping machinery, which alone is wanted to make Anderton one of the leading tin mines in the Tavistock district. Mr. J. Murray, of Torquay, is the purser and secretary.

TREVAUNANCE.-This mine is exciting attention. It embraces TREVAUNANCE.—This mine is exciting attention. It embraces one of the oldest and most celebrated properties in the renowned district of St. Agnes. Trevaunance proper comprises a very small area, but within its limits and above the adit level 200,000l. profits have, it is believed, been given. The present Trevaunance United sett now includes within its limits Wheal Coit property, so that the mine as it at present stands is one of the most extensive in the parish. Its value is considerably enhanced when account is taken of the various lodes which run through its entire length, and the large amount of money which has been actually laid out on the property. When all circumstances are taken into consideration it is surprising that these shares should be so low as 45s. each, a price at which they have recently changed hands. When they reach 10l. they will doubtless be eagerly sought after. The meeting of shareholders is due in the month of July. No call will be made, as a large surplus balance will be in the banker's hands.

Sortridge.—The No. 1 tin lode, so far as opened on, is producing

SORTRIDGE.—The No. 1 tin lode, so far as opened on, is producing well for tin. The manager states that they have never drawn better work for tin than they did on Friday and Saturday last. The ground for the wheel-pit is all taken out, and the masonry for the wheel will soon be commenced.

CAPPER PASS AND SON, BRISTOL, ARE BUYERS OF

LEAD ASHES SULPHATE OF LEAD, LEAD SLAGS, ANTIMONIAL LEAD, COPPER MATTE, TIN ASHES, &C and DROSS or ORES containing COPPER, LEAD AND ANTIMONY.

ROBERT C. FISHER AND SON,

GENERAL, CONSULTING, AND MINING ENGINEERS, S WAN SEA,

REPORT ON MINERAL PROPERTIES AND MINES, ADVISE ON ALL QUESTIONS OF THE WORKING AND MANAGEMENT OF MINES.

EDGAR JACKSON

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ANALYST AND ASSAYER,

Assays or Complete Analyses made of Copper, Silver, Lead, Zinc, Tin, and
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TO CAPITALISTS.

THE DIRECTORS of a PROGRESSIVE METALLIC MINE are open to TREAT, on liberal terms, for an ADVANCE of £3000 to £5000.

For particulars, apply to J. L. PALMER, 3 Redcross-street, Liver

SAMUEL JAMES, STOCK BROKER AND MINING SHARE DEALER, 14, ANGEL COURT, LONDON, E.C. Son of Capt. A. T. JAMES, late of South Frances, and other mines.

OFFERS FOR SALE, all or part, of the following shares free of commission:—
20 Arendal. 60 Genroy. 50 South Devon. 50 South Devon. 50 South Prances. 20 Grogwinion. 50 South Perances. 20 Grogwinion. 50 South Perances. 20 Genroy. 61 South Devon. 100 South Penstruthal. 30 Blue Hills. 35 Gunnislake (Clitters). 100 South Penstruthal. 20 Grogwinion. 20 Hingston Down. 100 South Penstruthal. 20 Killifreth. 10 Tincroft. 100 Tankerville. 100 Coates. 100 Moria Du. 100 Tankerville. 100 Tin Hill. 200 Contacovil. 30 Langford. 10 West Basset. 100 Moria Du. 10 West Frances. 100 Moria Bay. 20 West Kitty. 100 Devon Friendship. 200 Mysore Reel. 35 West Devon. 100 Devon Friendship. 200 Mysore Reel. 35 West Devon. 100 Deocath. 50 North Busy. 20 West Polbreen. 50 North Busy. 20 West Polbreen. 50 Seats Blue Hills. 50 Old Shepherds. 5 Wheal Agar. 30 East Chiverton. 100 Parys Copper. 10 East Pool, 100 East Roman Gravels, 50 Phenix United. 100 East Roman Gravels, 50 Phenix United. 20 Wheal Grenville. 25 Wheal Jane. 100 East Wheal Rose. 4 South Caradon. 50 Meal Uny. 50 Wheal Uny. 50 Gawton. 10 South Crebor. 25 Wheal Jane. 50 Gawton. 10 South Crebor. 25 Wheal Jane. 50 Wheal States. The present is a favourable opportunity to purchase low priced shares, and strongly recommend their purchase. 5. Jawss is a buyer or seller of most mining shares at close market prices. Orders by letter or telegram promptly attended to. 50 Poet and their purchase. 5. Jawss is a buyer or seller of most mining shares at close market prices. Orders by letter or telegram promptly attended to. 50 Poet and their purchase. 5. Jawss is a buyer or seller of most mining shares at close market prices. 60 Gentle by letter or telegram promptly attended to. 50 Coetas by letter or telegram promptly attended to. 50 Coetas by letter or telegram promptly attended to. 50 Coetas by letter or telegram promptly attended to. 50 Coetas by

ORACE J. TAYLOR, STOCK AND SHARE DEALER, 35, GREAT ST. HELEN'S, BISHOPSGATE STREET, LONDON, E.C., BUYS and SELLS every description of STOCKS and SHARES at the closest market prices of the day, either by telegram or letter. All enquiries prompty replied to.

West Devon Consols, Wheal Crebor, Bedford United, Parys Copper, Sortridge, and Mona Consols are worth the attention of intending investors, full particulars of which will be forwarded upon amplication.

and Mona Consols are worth the attention and Mona Consols are worth the attention of which will be forwarded upon application.

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BANKESS: The CENTRAL BANK OF LONDON.

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RICO SHARES.

The RICO SILVER MINING COMPANY OF COLORADO (Limited Liability), in order to provide funds for the further development of its mines, offers part of its working capital for sale

The shares are 10 dollars each par value, fully paid, and there is no further liability of any kind on them; 14,500 shares have been issued, which are held principally in London and Chicago, and 10,500 shares remain unsold, of which 1500 shares only are offered at 10s. per share. Recent advices from the mines indicate that this will suffice to place the company on

a dividend-paying basis. The Rico district is but three years old, yet it possesses some of the richest gold with silver producing mines in America—for example, the Sinbad Mine is taking out quartz from which a fair sample of first grade ore, assayed by F. Claudet, Assayer to the Bank of England, yielded 84 ozs gold and 1676 ozs, silver per ton; the second grade ore assayed at Rico, 5 ozs. gold and 210 ozs. silver per ton; the third grade ore assayed 2 ozs. gold and 63 ozs. silver per ton.

The Rico Silver Mining Company is engaged in a carefully managed business-like mining enterprise, which affords an exceptionally favourable opportunity for the realisation of very large dividends. It is not an undertaking organised MERELY FOR THE PURPOSE OF MAKING PROMOTERS' PROFITS.

The President of the company is at present in England, and will take great pleasure in sending to investors the "Annual Statement of the Rico Silver Mining Company of Colorado, which affords full information concerning the company's pro perty and purposes, as well as about the Rico district generally. This statement merits favourable consideration from all who think that mining for gold and silver ought to be a most profitable pursuit when judiciously entered into and carried on with skill and economy.

Address, J. J. West, care of L. D. Drake, Esq., 21, Abchurch lane, E.C., London.

Notices to Correspondents

Manganese and Manganese Eronze.—Will some correspondent kindly state the number or dates of the Mining Journal in which, or when (supposed to have been some years ago), articles appeared on the extraction and treatment of manganese ores, also on the manufacture of manganese bronze, and further say where quotations of current prices for manganese may be found?—J. H. E.

—J. H. E.

Gold Amalgamation.—"J. C." (King's Arms-yard).—It is a very unusual course to bring quartz "to England or elsewhere" to crush instead of treating it at the mines, unless it be a sample ton or so that is referred to. In that case there would be no difficulty. You should apply to Messrs. Johnson, Matthey, and Co., Hatton Garden, or to the Universal Reduction Company, Queen Victoria-street, to ascertain where the quartz should be delivered.

Tasmanian Tin—"A. N. P. "(Totnes).—The Mount Bischoff Tin Mining Company have no offices in England, nor have we heard of shares being sold in this country. A letter addressed to the secretary at Launceston, Tasmania, will no doubt receive attention. There has been a good deal of fluctuation in the shares in Tasmania, but the company maintains its position now the standing the reported further discoveries of tin both in neighbouring mines and in other districts of the province.

Recovered—"M. R. C. "(Philadelphia): We should much like such information.

other districts of the province.

Received.—"M. R. C. "(Philadelphia): We should much like such information and will readily afford space for the publication of the articles you contemplate writing.—"A. F. "(Pittsburgh)—"An Old Reader "(Salford)—"Shareholder (Griffin)—"N. Y. "—"J. D." (Oldbam)—"B. R. W. "(Chiswick)—"S. B."
"C. S. H." (Andover)—" Correspondent "(Electric Light for Mines): All thinformation procurable can be obtained from the Journal—"X. Y. Z."
"Shareholder" (Devon Great Consols)—"W. E."—"Shareholder" (Whee Constant Reader" (Wolverhampton).—"R. T." (Birmingham-"M. M.")

THE MINING JOURNAL,

Bailway and Commercial Gazette.

LONDON, JUNE 3, 1882.

NEW IRON-MAKING DISTRICTS.

The present year is likely to see three new fron-making districts opened out in three different counties. In Nottinghamshire there are two furnaces completed on the estate of the Duke of St. Albans, at Bestwood, by a company who have secured the mineral rights over the estate, consisting of nearly 4000 acres, and to which there is direct railway communication. The company, some time since, opened out the estate by sinking to the coal measures which are part and parcel of the great Midland mineral field, the southern boundary of which commences at Nottingham, which is only four or five miles to the south of Bestwood. In connection with the coal measures there are the usual deposits of ironstone, such as have been worked in Derbyshire and the West Riding; but as the furnaces are near to the vast ironstone fields of Northamptonshire, Rutlandshire, and the vast ironstone fields of Northamptonshire, Rutlandshire, and Lincolnshire, and there will always be supplies from those counties, in addition to what may be raised on the spot. The colliery is one of the finest in the Midlands, the Barnsley or Top-hard coal being about 420 yards from the surface, and below the Barnsley coal there are several other beds of various thicknesses, including the well-known and valuable Silkstone seam. The former consists of at least two distinct qualities of coal, "softs," or households, and "hards," steam coal. Owing to there being no shipping port near the colliery owners in both Notts and Derbyshire have found great difficulty in disposing of the steam coal, whilst, owing to being at no culty in disposing of the steam coal, whilst, owing to being at no great distance from the southern and London market, in particular the house coal sells tolerably well. Indeed, the Bestwood Company have been sending at the rate of nearly 50,000 tons a year to the Metro polis alone, the productive power of the mine being equal to upwards But with respect to the steam coal, it would pear as if the furnaces had been erected to absorb that part of the produce of the mine, or as much of it as possible. There are two furnaces constructed in the most complete manner, and the works are capable of being greatly extended. There are patent stoves for utilising the gas, whilst the blowing-engines have 100-in. cylinders. There are three distinct lines of railway connected with the works, so that iron can be sent direct to any part of the Kingdom, and with a moderate rate, which is ensured, the iron of Nottinghamshire should make itself known in all directions. Northamptonshire, far distant from any coal field, can now boast of 25 blast furnaces, so that it is most probable that in the course of a very few years we shall Nottinghamshire taking a prominent place as

In the adjoining county of Leicester ironstone has been found, but In the adjoining country of Leacester from one has been no great inducement to work it, so that the 35,000 tons raised last year had to be sent away. Yet there is plenty of coal suitable for smelting the stone. The coal field, although not large, is still a most valuable one, and the measures underlie the New Red Sandstone to an unknown distance towards the south and west. In one part of the district the main seam of coal is from 12 to 14 ft thick, whilst the Heath-end coal and Cannel is 10 ft. thick, whilst here are several other seams varying from 3 to 6 ft. The field ha not been much worked for the output last year was only 1,145,000 tons, of which nearly 1-10th was sent to London. The Holcomb Company have one furnace complete, and are building a couple

more, so that Leicestershire, with its coal and ironstone, and being in still closer proximity to what may be termed the great collide Midland deposits of Northamptonshire than Nottinghamshire, it should become a by no means unimportant centre of the pig-iron trade. The last of the counties where ironstone has been recently met with is Oxfordshire, and there a large brick plant has been laid down and bricks have been made for the building of a couple of furnaces on the most approved principles by a London company, who have leased a large area of ironstone from the Duke of MARL-BOROUGH. The only disadvantage connected with the new district is that there is no coal within some considerable distance of it. But in this respect it is fully as favourably situate at the least as Northin this respect it is fully as favourably situate at the least as North-amptonshire, whilst it is, perhaps, better off in being nearer to Staffordshire, which is the principal market for colitic pig. But the railway companies hitherto have given favourable rates for coal going into smelting districts, and the necessary supplies could easily be obtained by the Oxford, Worcester, and Wolverhampton Rail-way from Staffordshire, and in all probability by the Midland from Derbyshire or Notts, whilst South Yorkshire now supplies several important iron-making districts with an excellent quality of coke. In Warwickshire ironstone is now being raised and sent away into important iron-making districts with an excellent quality of coke. In Warwickshire ironstone is now being raised and sent away into other districts. But were it made in that county—and none are more advantageously situate for the purpose, there being plenty of coal for smelting, and the important manufacturing town of Birmingham to take all that could be produced—and there is every probability that it will be, then we should have a series of iron-making counties extending in a direct line from Yorkshire to within 50 miles of the Metropolis. It is, therefore, evident that the iron trade is extending southwards in the direction where it once flourished the most when ironstone was smelted with charcoal, which denuded the forests of Kent and Sussay of a large portion of their layuriant of Kent and Sussex of a large portion of their luxuriant growth of timber.

THE SYSTEMS OF WORKING COAL MINES. SAFETY AND ECONOMY.

In connection with the numerous fatal accidents that take place our coal mines, the question as to the best and safest system working so as to prevent them as far as possible, has not received much, if, in the majority of instances, indeed, it has received any attention whatever. Yet it has been shown from practical experience that some seams of coal can be worked more effectually and with less danger by one known system than by another. There are two well-known modes of working coal—the "longwall" and the "pillar and stall"—and one will be found more advantageous than the other under certain conditions. found more advantageous than the other under certain conditions for in adopting a principle, more especially in a new mine, allow-ances have to be made for the thickness of the seam to be worked and the pressure and peculiar form of the exuding dangerous and explosive gas. These concomitants having been ascertained and studied, there should not be much difficulty in being able to determine the mode in which the mineral should be worked. But at a great many places the course that has been pursued for years is carried out, although the circumstances of the mine have changed, whilst managers have prejudices in favour of the system they have been used to, and adhere to it. At one place in the West Riding of Yorkshire, where nearly 200 persons were killed by an explosion, there a system was carried out in it and other mines the scene of fatal explosions, that was strongly condemned by many of the ablest mining engineers. From the bottom of the shaft the main levels were driven north and south, and in the rise side the middle and bank levels were driven simultaneously with the main level, openings being driven 30 yards apart from the main to the bank level. and about 40 vards asunder from the main to the water level. bordgate 2 yards wide was driven towards the rise of the seam to the bank or highest level; then another bordgate was started 8 yards from the first, and these were driven together, openings having been cut through the coal between every 20 yards. When the levels ad-vanced 110 yards further similar bordgates were driven, and in the centre, between the two pair of bordgates the leading bank, 18 yards wide, was started from the bank level and worked towards the rise of the seam. As the bords advanced slits were driven, and these wide, was stated the bords advanced slits were driven, and these being holed into the bank became the roads through which the coals were conveyed from the face. Following up banks were then carried forward, and second ones started from the bank level, and these were continued. This system has long since been superseded, principally by longwall, and accidents from explosions in the district alluded to for many years past have been of rare occurrence, and have led to the for many years past have been of rare occurrence, and have led to the expression of opinion on the part of the miners, as well as others, that longwall has greatly increased the safety over bord and pillar or any other mode of working. The Royal Commission on Accidents in Mines in the early part of the enquiry took some evidence as to the systems of working coal, and it showed a decided preference for the longwall as against the pillar and stall principle. Where the former system prevails, as in the North of England, fewer deaths have taken place from "falls of roof," and as the latter are entirely supported by timber props they cost less than keeping the roof up by means of packwalls. Longwall, too, can be modified in consequence of the nature of the ref, or from any other neguliarity of the strate. the nature of the reef, or from any other peculiarity of the strata

or sides.

There appears also to be a saving in working longwall, for Mr. W. O. Wood, in treating of the introduction of it into the East Hetton Colliery states that the waste was very much less than in the bord and pillar method, practically the whole of the seam being got, 1½ per cent. was the calculation of loss and waste in the longwall, and 5 per cent. by the pillar principle. The product of round coal was 68 to 69 per cent. against only 46 per cent. under the old mode of working, whilst the consumption of timber was extremely light. In another instance where a cutting machine was used on the same principle of getting, and taking the figures for four years we are told by a gentleman of the highest standing as a mining engineer told by a gentleman of the highest standing as a mining engineer that 96 per cent. of the whole seam was obtained, and although it was a soft coal there was not more than 8 per cent. of slack. At one of the largest mines in the Wigan district, which was found to have all the characteristics peculiar to the deep seams in that district, a large quantity of fire-damp, and with a knowledge of the many explosions which had taken place in the locality, led to the considera-tion as to how the coal was to be worked, whether by longwall or by pillar and stall, which was the mode pretty generally adopted in the district, and after taking a good deal of practical advice as well as deliberation to the matter the former was decided upon. And here it may be said that underneath the 6 ft. seam, which is of a fiery nature, there is a thin but very gaseous seam, and with the view of preventing the upward pressure of the gas lifting the roads or there being outbursts from it boreholes have been made in various parts of the 6 ft. mine about 11 in. in diameter, and through these the gas when first tapped had come away at the rate of upwards of 800 cubic face per hour was gradually exhausted. The longwall mode of getting coal is a simple one, and is easily described as carried but at the Wigan Colliery alluded to. In commencing work the miner sprags the face of the coal to make it secure, and the dirt under-neath is holed out to the required distance, the sprags are removed, and the roof, which has a natural drag on to the coal, owing to the gradual subsidence going on over the wall or pack by which it is only partially supported brings down the coal without either shotfiring or the employment of any other forcible agent. The coal is then hauled out of the mine, the newly exposed face is again spragged, and the work goes on the same as before, the miner leaving behind him, excepting where the drawing ropes have to be kept open, a continuous wall or pack formed of the metal and the dirt holed out from under the coal. When there was a face 300 yards holed out from under the coal. When the transfer of 10 yards as the long short drawing roads were left at intervals of 10 yards as the work progressed. No chocks were set in any of the roads, and very new roads. few bars or props were required, and the sprags we may say are removed by persons specially appointed for the purpose, as is the case

in the North of England. The coal being removed front sprags were again set, and the face gradually advanced, until at a distance of about 100 yards from the starting level the first long rupture of the overlying strata takes place. The dirt when the holing was made varied a good deal, going in 18 in. to 3 ft., so that the distance between the drawing

roads had to be increased. In consequence of the roof being well packed no place was left for gas, and it settled down regularly, taking about 18 months to press the packing apparently to resist any further downward movement, so that about 100 yards from the face taking about 18 months to press the packing apparently to resist any further downward movement, so that about 100 yards from the face the roof was quite settled, and required no more timber. One not unimportant advantage of the system was that the coal was got in much larger pieces, and, therefore, in a more marketable state, the quantity of slack made being considerably less than by any other mode, whilst there was the still further advantage that by longwall shot firing and the use of dangerous explosives is practically done away with. Seeing that many explosions have taken place from blasting we have here a strong argument in favour of doing away with it. Indeed, we are told that the yield of round coal over a \(\frac{1}{2}\)-in. screen was 80 per cent, as compared with 50 per cent. by pillar and stall working, where all the circumstances and conditions are the same, whilst the cost of timber for propping was only one-halfpenny per ton. At another colliery in the same district, and one of the largest in it, two of the seams are got on the longwall principal, and, indeed, in most of our coal bearing districts it is carried out to a greater or less extent, and in South Yorkshire, noted for its fiery seams, the system is the rule. Where coal-cutting machinery has been introduced longwall is almost a necessity. Inmachinery has been introduced longwall is almost a necessity. In-deed, unless the roof of the mine is of a such texture as to admit of sufficient open space for the coal-cutter to stand between the props and the face of the coal, or if the coal itself will not remain in situ till the requisite extent of boring is completed, or if the roof of the coal be loose or full of joints, so that the coal cannot be worked longwall, then in the former two cases the coal cutter cannot be employed, and in the latter it cannot be worked except at considerable expense, perhaps at a higher cost than by the ordinary method. At the present time, however, it is more than ever neces-sary that coal should be produced at the least possible expense consary that coal should be produced at the least possible expense consistent with the maximum of safety, and there is no reason why there should be so much waste as there is at present, owing to the mode of working. Considerable progress has been made in coal-cutting machinery, as the defects of those first produced have been fully ascertained, so that inventors have been able in great part to remedy them. The question of the safest and most economical system of raising coal is really a national one, and as it is likely to be a feature in the forthcoming report of the Royal Commission we have thought it our duty to point out the advantages of that mode, the value of which has been recognised in all those districts where it has been carried out, and is now being adopted in so many places in preference to the pillar and bord, and for the reasons we have given above. given above.

THE INDIAN GOLD MINES.

The alternations of hopes and fears with regard to the stability and future of the Indian Gold Mines which have had possession of the minds of capitalists for the past two years will now give place to a steady feeling of confidence in their permanency and value That there was greater delay in the realisation of the results promised in the prospectuses than had been anticipated cannot be denied, and more than once the assertion has been positively made that Anglo-Indian gold mining was a myth, and that the various empanies placed upon the market were almost fraudulent in their inception, and that mining proper had never been seriously intended. But the careful reader can scarcely have failed to observe that in all the adverse statements there was a clumsily-hidden admission that gold was there, and that enormous quantities must at some time have been taken away. Even those who declared the absence of gold reefs admitted that there were quartz veins; and when pressed closely with reference to their statements that those veins contained no gold, they were constrained to admit that the precious metal was certainly found in the mullock which accompanies the vein. They were in fact, upon the horns of a dilemma. precious metal was certainly found in the mullock which accompanies the vein. They were, in fact, upon the horns of a dilemma—they could not reconcile the actual finding of gold, in however small quantities, with their assertion that none existed. But the delay which has occurred favoured their sinister expressions and the anxiety which at one time existed as to whether the Mysore or the Wynaad district would be first in making returns, gave way to an anxiety whether any returns would be forthcoming from either. The Wynaad has earned the place of honour, for the Indian Phoenix has now got regularly to work, and the first eight tons crushed has given a yield of from 10 dwts. to 15 dwts. per ton free gold independent of pyrites—a produce which in steady work ing would leave a handsome profit for the shareholders. And this result is no less favourable to the reputation of the district than to

result is no less favourable to the reputation of the district than to the prospects of the Phœnix shareholders, since it proves the continuity of the reefs—for capitalists will excuse them being called so as long as they produce gold in remunerative quantities, even should the definition prove technically inaccurate—and, therefore, increases the intrinsic value of the neighbouring properties. That the same reefs exist on both sides of the stream which divides the Indian Phœnix from the Indian Consolidated seems but reasonable and in the Balcarres and Dunbar part of the Indian Consolidated property not only is there much quartz ready for crushing, but there is a healthy-looking reef which they have worked upon to the depth of 30 ft. already without finding the bottom. The map the depth of 30 ft. already without finding the bottom. The map issued with the Indian Consolidated prospectus is convenient for reference upon this question, and shows that the reefs of that property and of the South-East Wynaad are identical, and that the richness of one estate being proved that of the whole group may be assumed. The extent to which this view is justified will soon be demonstrated, for there is now the Phenix at work, the Glenrock (which now includes South Indian) with 20 stamps ready for starting next month: the Trevelyan with alluvial deposits which will quickly be returning gold; the Indian Consolidated, which only issued its prospectus just twelve months since, almost as forward as any of them with its appliances for making returns; and Devala-Moyar and others actively preparing to bring up the rear. It would appear, then, Wynad shareholders may be congratulated upon their present prospects, and may rest satisfied that, although they have had to submit to some delay and disappointment, the promise of recompense for it is now before them.

THE VERDICTS ON THE COLLIERY EXPLOSIONS IN THE NORTH.

As we noticed a short time since the verdicts of juries in the case of mining explosions are generally of an exculpatory character, all persons being thoroughly exonerated from blame, whilst nothing is persons being thoroughly explicated from bland, which has been the case at said as to the probable cause of them. This has been the case at Tudhoe and West Stanley. At the former in particular it was shown that blasting was carried on. One of the fore-overmen, who was not likely to inculpate anyone or find fault with the system of working the coal, said a shot was fired previous to the explosion, but he gave no instructions for that shot to be fired. At the same time he said he did not think there was any danger from shot-firing in the workings, but he ought to have been told that the shot was going to be fired. These men, of course, never see danger in the use of powder, whilst experienced engineers look upon it as having been the cause of many explosions, and always to be feared. The manager described the colliery as an exceedingly safe one, and stated that every precaution has been taken to render the colliery free from accidents. Here, again, we find that blasting was looked upon as an innocent matter or a safety-valve, although every person connected with mines does or at least ourch to know that the use connected with mines does, or at least ought to, know that the use of it is always attended with danger. So long, however, as we have managers of a contrary opinion, so long will we have catastrophes similar to that which took place at Tudhoe, and no doubt with a much heavier loss of life. The jury took the same view as the manager as to the use of powder, looking upon it as a necessary and safe element in colliery working for after half an hour's delibera. safe element in colliery working, for after half an hour's delibera-tion, they returned a verdict that "the explosion occurred from the fall of a stone in the west pit upon the sett, but how this occurred there was no evidence to show." They also thought that the deaths crus
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of the men killed were purely accidental. Now the falling of a stone by itself would not set fire to a body of gas, for there must be the light or flame. No doubt there was a heavy fall by which a good deal of gas would be liberated, sufficiently so to form an explosive mixture when mixed with a certain proportion of atmospheric air; but the point to our thinking is how it was fired, by a shot or otherwise. If, as in all probability was the cause, blasting was the cause, then there is another added to the scores of arguments, silent if we may call them, but no less significant, for they are those of the dead and mangled, against the use of gunpowder in mines where the strata is known to give off gas, if not for its entire prohibition in all coal mines. entire prohibition in all coal mines.

COAL IN FRANCE.

While England has carried her annual coal extraction to about 130,000,000 tons per annuar, while Germany has now risen to nearly 50,000,000 tons annually, and while between 50,000,000 and 60,000,000 tons are now extracted every year from the soil of the United States, the utilisation of the coal wealth possessed by France makes but slow progress. Still, French coal mining cannot be said to be a stationary industry. Some advance has undoubtedly been made during the last twenty years. In 1850 the production of coal in France stood at 4,433,567 tons. In 1860 this total had receded to 4,309,622 tons, but in 1870 it had been carried to 14,330,008 tons, and in 1880 it had further expanded to 19,412,412 tons. The imports 4,309,622 tons, but in 1870 it had been carried to 14,330,008 tons, and in 1880 it had further expanded to 19,412,412 tons. The imports of coal into France in 1850 amounted to 2,791,700 tons; in 1860 to 5,900,630 tons; in 1870 to 4,779,650 tons; and in 1880 to 8,635,014 tons. The French have thus become more dependent upon their neighbours for coal than they were 30 years since. The consumption of coal in France has outstripped the production during the last 30 years, although not to any very material extent. We may just note that the consumption of coal among the French stood in 1850 at 7,282,867 tons; in 1860 it had risen to 19,270,287 tons; in last 30 years, although not to any very material extent. We may just note that the consumption of coal among the French stood in 1850 at 7,225,267 tons; in 1860 it had risen to 10,270,252 tons; in 1870 to 10,109,958 tons; and in 1880 to 28,047,126 tons. The great growth of steam power and the progress of wealth and luxury among the French no doubt account for the continual increase in the production. Although the French have not succeeded in supplying their coal requirements, they have, however, not been altogether unsuccessful in their efforts to keep pace with the progress in the demand for coal on the part of the French public; and it is certainly satisfactory that this should be the case, as every country which claims to occupy an important position in the world ought clearly in these days of steam railways, steam shipping, and steam impelled industries to, at any rate, substantially meet its own coal requirements if it cannot spare any black diamonds for its neighbours Probably the principal reason why coal mining has made such comparatively slow progress among the French is the fact that until within a comparatively recent period manufacturing industry has not acquired such an important development in France as in Great Britain or the United States. Another cause which has tended to reduce the production of coal in France has been the tendency of the French to embark in agricultural and viticultural industries in preference to a pursuit requiring them to pass a large portion of their lives underground. The gay and lively Frenchman is, to some extent, a childof the sun, and he does not feel himself when deprived of the light and warmth of that great luminary. The third influence which tends to check the progress of French coal mining is the magnitude of the standing army maintained by the French Government, which diverts a large proportion of the flower of the French youth from useful pursuits of every kind. Nevertheless, in spite of every obstacle and every drawback, coal mining does make some advance in manufactures grow in importance there is no doubt that the extraction will increase still further in response to the influence and pressure of a growing demand. The same tendency of population to desert rural districts and to crowd into great towns is observed in France as in other countries; and as this tendency is highly favourable to the development of manufacturing pursuits which depend upon steam for motive power, it is calculated to assist and encourage the further progress of French coal mining.

KAPANGA OF NEW ZEALAND.—The results of the latest two test crushings of the quartz of this property have shown an average of 2½ ozs. to the ton of quartz. The last (received last week) being 100 ozs. of gold from 40 tons of quartz. This is most satisfactory, and what would have been the price of any of the Indian mines could similar results have been obtained. The capital of the Kapanga is 100,000l., of which only 79,000l. is issued, and the company has ample funds to prosecute development, ample machinery, including 50 head of stamps being on the property. Before the resuscitation of the company the shares of the old company have been over 6l. a share, and there is no reason why they should not reach the figure again, especially if such returns as the above continue. The 1l. shares, now quoted at about 12s. 6d. a share, present an excellent mining speculation. The company has just obtained a quotation in the Official List of the Stock Exchange.

ROYAL CORNWALL POLYTECHNIC SOCIETY.-The forty-ninth an-ROYAL CORNWALL POLYTECHNIC SOCIETY.—The forty-ninth annual report—that for 1881—of this society has just been issued. In addition to the report of the general meeting the volume contains the reports of the General Committee and of the Meterological Sub-Committee for the year; and a report of the forty-ninth annual exhibition, embodying the President's address, the Judges' reports, and Exhibition Notes, which contain a large amount of information and brief descriptions of inventions which will be of general interest. The report can be forwarded by post for 2s., and is well worthy of attentive perusal. Amongst these notices are Mr. N. J. Holmes's lecture on Danger Signals at Sea, and exhibition details of Baxter's patent knapping motion stone breaker and ore crusher, Balmain's luminous paint, Wright and Stephen's water regulator, Halliday's high pressure self cleansing filters, Cox's save-all gas stoves, Stott's luminous paint, Wright and Stephen's water regulator, Hallindy's high pressure self cleansing filters, Cox's save-all gas stoves, Stott's gas valve and governor, Johnson's sleeping berth for married emigrants, Mead's reflex chair-desk and bench, Dodson's furnace bars, Heron's duplex gas burners, Dale's clapper stay for silent bell practice, Pryor's pulveriser, Nichol's method of stopping the rush of water into a ship when the exterior skin is fractured, the Normandy rock drill and air compressor, Cox's self-acting syphon, and Sampson's patent water waste preventor.

THE DEVELOPMENT OF THE COAL AND IRON MINES IN CUMBERLAND.—Most of the proprietors of iron ore mines and some of the colliery proprietors have for a considerable time past been actively engaged in boring operations with a view to further develope the mines. From the reports which have come to hand the operations have been very successful, especially in the iron mining districts. In the neighbourhood of Cleator Moor, Frizington, and Woodend several new shafts have lately been put into operation. The Moresby Coal Company have succeeded in finding a rich seam of coal near Distington.

California Gold.—A telegram dated May 29 states that the "machinery starts about June 15, then begin milling." The managers state that the powerful machinery now erected with the object of making a large increase to the former output will doubtless soon make up for the delay incident to the alterations required. The suspension of the weekly profit of 500l. was not due to any falling off in the yield, but rather to the fact that the reserves were reported to be sufficient to supply ore much more extensively if the machinery and shafts were sufficiently enlarged to deal with it.

LITTLE GLAUCUS, -Although many are relieved of the contents of their pockets by their own carelessness, or through grasping at the shadow and losing the substance, it would appear that London professionial pickpockets have during the past ten years given evince that th public are entitled to some protection against them. No less than 16,154 persons have been convicted in London alone for petty larceny against the person, the property appropriated being valued at 68,650%. The Little Glaucus is intended to prevent this wanthorised assessment, and consists of a U-shaped tube affixed to a back plate, which is fastened to the dress or pocket by a safety pla. At the top of one side of the U-tube a bent lever is fixed, which

in falling closes the opening. The bow of the watch can be inserted by lifting the bent lever, and once inserted no violence can remove it, although it is stated that with practice the patent will cause no inconvenience in the withdrawal or restitution of the watch or other article which may be protected by it.

SOUND INVESTMENTS.

CANADIAN RAILWAYS.—THE GRAND TRUNK AND GREAT WESTERN OF CANADA RAILWAYS.—No time has been lost by the new board of the Great Western Railway in arranging the preliminaries for establishing more harmonious relations with the Grand Trunk Company. Notwithstanding many incidental difficulties, the terms of the proposed agreements have already been settled, and these will be submitted to simultaneous meetings of the shareholders in both undertakings, on the 29th inst. Before that date arrives the full text of these agreements will be circulated amongst the proprietors, and I have not the least doubt that they will be

arrives the full text of these agreements will be circulated amongst the proprietors, and I have not the least doubt that they will be ratified unanimously.

Proprietors in these railways should attend the forthcoming meetings, as there is not the least doubt that very interesting information will be given by the presidents as to the future working of the lines. The economies to be effected by the two railways henceforth working together in harmony will then for the first time be explained. It is most important to remember that by ratifying the agreements on the 29th inst., they will at once become operative, the practical union of the Grand Trunk and Great Western Companies dating from July 1. lating from July 1.

dating from July 1.

The immediate outlook is therefore decidedly hopeful. Both companies will at once enjoy the benefits secured by the fusion and for many reasons their earnings are likely to compare very favourably with last year. They will not suffer now from the disturbing influences of the war of rates, which prevailed throughout the whole of the last six months of 1881, for which period the decreases were 40,9471 and 33,300l. respectively. Again, the harvest prospects are decidedly good, whereas in 1881 they were the reverse Immigration is going on at a rate beyond all precedent, and the tide is setting in a direction which is likely to be productive of more permanent good to Canada than at any former period. The rapidity with which the district of Manitoba and other enormous tracts of country are being opened out must (apart from the mere carriage of emigrants and to Canada than at any former period. The rapidity with which the district of Manitoba and other enormous tracts of country are being opened out must (apart from the mere carriage of emigrants and merchandize thither) inevitably tend to the constant enrichment of the Canadian lines by which alone access to them is obtained. Thus, a reference to the map which I recently published will show that Manitoba is now reached by the Grand Trunk Railway, vià its Chicago extension, and also in summer vià Georgian Bay. As pointed out in my last circular, there is little doubt that the large holding of the Grand Trunk Company of 1,192,000l. Ordinary Stock in the Chicago Extension Railway will, in view of the enormous growth of traffics on that line, rapidly become a valuable asset.

In view of these facts and the stronger position now occupied by the Grand Trunk and Great Western working together in peace, I regard the securities of both railways as decidedly attractive investments. They are all very much lower than at this time last year, when their prospects were nothing like so hopeful, and those who now buy for investment, must realise a handsome profit during the next few months. The proposal to issue Deferred Certificates to the holders of Great Western shares to represent their contingent rights after the 3per cent. guarantee, and to which I referred last month, meets with general approval. It is estimated they would be worth 2l. to 3l. per share.

MIDLAND RAILWAY OF CANADA.—Five per cent. 1st Mortagage Bonds. The price of these Bonds has remained stationary during the nast month—wich I then are reason which I then are the same month—with 1 the proposal regard the proper means the price of these Bonds has remained stationary during the nast month—with 1 the proposal to the proper means the price of these Bonds has remained stationary during the nast month—with 1 the proper means the price of these Bonds has remained stationary during the nast month—with 1 the proper means the price of these Bonds has remained stationa

gage Bonds. The price of these Bonds has remained stationary during the past month—viz., 94. For the same reason which I then recommended them as a perfectly safe investment I now again

advise their purchase.

MEXICAN RAILWAY.—This company continues to steadily advance in prosperity. During the past month the earnings have again increased considerably; and I have no reason to doubt the accuracy of my previous estimate, that by June 30 next there will be a surplus of from 35,0001, to 40,0001, over last year, when 8 per cent. dividend was paid on the Ordinary Stock. The directors' report, recently issued, not only records the present position as very sound, but expresses most favourable oningons as to the growing. report, recently issued, not only records the present position as very sound, but expresses most favourable opinions as to the growing wealth of the country and this railway's participation therein. Having persistently urged that its development would continue uninterruptedly, it is very gratifying to find my views correct. It may interest the proprietors to learn that in a recent article in the leading Mexican newspaper with reference to the Mexican Railway Company it was stated:—"Strong as has been the record of the road in the past, it promises to become better and better, for it shares, of course, first and directly in the development of awakening Mexico."

At the meeting held this week the Chairman supplemented the report by very favourable statements as to the general position of the company, and particularly with reference to the growth of the local traffic. He also explained that there is no justification for the rumour which has been industriously circulated to the effect that this company, under the terms of its convention with the Mexican Government is researched from ever paying a higher dividend than

There is no reason why this stock should not advance to 130, as upon the basis of only an 8 per cent. dividend the return to an investor would then be $6\frac{1}{8}$ per cent. Judged by comparisons, the 8 per cent. First Preference is worth 170, at which the return would be $4\frac{3}{4}$ per

net, and the 6 per cent. Second Preference is worth 120, at which he return would be 5 per cent.

PHILADELPHIA AND READING RAILROAD.—During the PHILADELPHIA AND READING RAILROAD.—During the prevalence of a variety of adverse rumours last week, I addressed an enquiry to Mr. Gowen, the President of this railway, who is now in London, as to whether there was any justification for the depreciation in value which had thereby been cocasioned, and his reply, Age, or Notes on the Origin of the Great Lakes of North America, to my enquiries was so distinctly favourable and re-assuring that I circulated it amongst such of the proprietors who were known to me. It is to be hoped that the holders of the Deferred Income Bonds were not frightened into selling at the absurdly low prices to which they were forced, as Mr. Gowen states—"there is nothing whatever, either in the traffic returns or the financial condition and excavated wholly or partly by glacier action, and that the basins whatever, either in the traffic returns or the financial condition and prospects of the company, to warrant a fall in the price Deferred Income Bonds or any other of its securities;" and —"I confidently expect the company to earn a dividend upon its common shares this year, and a further dividend upon the Deferred Income Bonds in 1883." In view of this official announcement in-

restments may safely made at current quotations.

VARNA RAILWAY.—Since the publication of my recent advertisement addressed to the share and bond-holders, a marked improvement has taken place in in the securities of this railway. The letter subsequently received from the Foreign Office shows that the British Government are vigorously enforcing the claims of this company upon the Bulgarian Government under the Treaty of Berlin. In addition to this, independent negotiations are now proceeding, from which important results are confidently expected. Varna 3 per cent. Obligations, 20% each, payable to bearer and entitled to 4% 16s. arrears of coupons, can now be bought at about 81. 5s., or exactly one-third of their nominal value. At this price they cannot fail to prove a very profitable speculation.

GREAT WESTERN AND GREAT EASTERN RAILWAYS.—

Great Western stock has further risen 3 per cent. during the past month, Great Eastern has remained almost stationary. The value of both, however, must advance.

CORNWALL MINERALS RAILWAY.—The proposal to recon-

CORNWALL MINERALS RAILWAY.—The proposal to reconstruct the capital account of this railway, as explained in the directors' recent circular, will no doubt, with few modifications, receive the support of the properitors, as it is likely to tend considerably to the improvement of the property.

RAILWAY INVESTMENT COMPANY.—Since recommending the securities of this company last month the Preferred and Deferred have both risen 1 per cent. They are still worth buying. TRAMWAYS.—The market for these securities has displayed more animation during the last few weeks than for a long time previously. The earnings of many of the companies are steadily improving, and in view of this fact and the revival of business in the various shares, quotations are likely to advance. I continue to advise the purchase of Anglo-Argentine, Bordeaux Preference and Ordinary, Calais, Dublin, German, Hull, Liverpool, and Provincial. ELECTRIC LIGHT AND TELEPHONE COMPANIES.—It will be remembered that since the establishment of these enterprises I

ELECTRIC LIGHT AND TELEPHONE COMPANIES.—It will be remembered that since the establishment of these enterprises I have recommended investments in the leading companies, and last month I again prominently referred to them; but following immediately upon the issue of my circular a remarkable and extraordinary rise in quotations took place, which far exceeded all expectations. A large number of new companies were consequently brought forward, and as it was feared that competition would result, a natural re-action in values set in. Well-established concerns like the Brush and Hammond Companies have been enabled to accumulate large cash resources through payments by subsidiary undertakings, the formation of which has also secured to them permanent customers. Investors in these securities who have followed manent customers. Investors in these securities who have followed my recommendations have had the opportunity for realising immense profits during the recent excitement. CANADIAN COPPER AND SULPHUR COMPANY.—The largely

increased produce of the smelting works (now reaching nearly 100 tons of regulus per month), and the marked improvement in the condition of the copper market, cannot fail to have a very important effect upon the prosperity of this company. The shares to which I directed attention last month have advanced from 22s. 6d.

INDIAN GOLD MINES.—At last the change for the better, which I have so long anticipated, has come over the market for these securities. There is no doubt the events of the past month as affecting these properties have amply justified the improvement in quotations, the works on the various estates in India being now in a very fortions, the works on the various estates in India being now in a very forward state, so that there is every probability that in a very short time the respective companies will be in a position to make some important announcements. On the Indian Phœnix a start has been made with good results, the first crushing of quartz having yielded nearly 15 dwts. of fine gold to the ton, leaving the pyrites, which are estimated to be very valuable, for subsequent treatment. The Glenrock Company are expected to be in full work early next month, and the utmost confidence prevails as to the result. It will be remembered that the South Indian is now amalgamated with the Glenrock Company, and many advantages have been derived by working the Company, and many advantages have been derived by working the two undertakings under one administration. The Indian Consolidated are also rapidly pushing forward their operations. The engineer reports as follows:—

"I am very pleased to say that the prospects of the Indian Consolidated are very good; I believe second to none on the Wynaad, and, I am inclined to think, ten times better to-day than they were five months ago."

In consequence of the favourable statements made at the meeting of the South-East Wynaad Company some weeks since, the 1l. shares have since advanced to 3l., and although there is every reason to believe that the Phænix, Glenrock, Trevelyan, and Consolidated properties are equally rich, their shares are quoted at very much lo prices. All these are well worth buying, and though it may somewhat invidious to make a selection from them, I think somewhat invidious to make a selection from them, I think the shares of the Consolidated Company are perhaps the cheapest at the present time. Eleven months since, when this company was introduced, the shares commanded a premium of 5s., or 25 per cent., the vast extent of the property, the well-known character of the reefs upon it, and its contiguity to other estates whose most valuable reefs were understood to intersect it, all tending to stimulate a great demand for the shares. Yet, in defiance of all these facts, and the valuable experience gained in the interval as the works have proceeded, and the engineer's report, as above quoted, that the property now appears ten times more valuable, the shares are only quoted at 1t. There are indications that the excitement which lately prevailed for Electric Light securities is being transferred to Indian Gold Mining shares, which, being of so very low denomination, are additionally attractive.

attractive.

LA PLATA MINING AND SMELTING COMPANY (Limited Liability).—Nothing could be more favourable than the report just issued, accompanying the thirty-third consecutive monthly dividend warrant, which is again at the rate of 12 per cent. per annum. The following are extracts:-

"The furnaces continue their daily work as regularly as possible, and with as much satisfaction."
"Ores are more abundant than at any time in the history of our

Camp, and prices are being well maintained."

In the present improved aspect of the market for mining securities the shares of this company, yielding as they do a very high rate of interest, may safely be bought in the expectation of an appreciable rise in value and also to mix with other progressive mining properties, such as the South Indian Gold Companies, and which at the moment are not yet raying dividings.

the moment are not yet paying dividends.

— From Mr. WM. ABBOTT'S Circular for June, 16, Tokenhouse Yard, London, E.C.

PRACTICAL GEOLOGY IN CANADA.

The importance of a thoroughly reliable geological record for facilitating the operations of the practical miner has been so frequently pointed out in the *Mining Journal* that it will be acknowledged that all who give their attention to field geology perform a useful service to the community, and one too which may subsequently prove of real pecuniary value. In continuation of his papers to which reference has already been made Prof. J. W. SPENCER, F.G.S., vice-president of King's College, Windsor, Nova Scotia, has recently furnished much additional information, two of his most recent communications being a Short Study of the Features Lakes, that their basins are geological valleys, that the basins were excavated wholly or partly by glacier action, and that the basins were excavated by atmospheric and fluviatile erosion, with their outlets closed by the drift of the ice age, assisted probably by geological uplifts. It is the relative value of these explanations that the paper

discusses.

Describing the features along the preglacial outlet of the Eric basin into the basin of Lake Ontario. The Niagara escarpment encloses the western end of Lake Ontario by its hills which face the lake just beyond its southern and western shores. Through this escarpment at the extreme end of the lake the Dundas valley is excavated. That the Dundas valley is not of glacier origin is he observes almost too apparent for consideration; not only is there found a river capable of excavating it, but the very nature of the valley, with more or less perpendicular walls, is not of such a character as to admit of its excavation by the erosion of glaciers. Lake Ontario to admit of its excavation by the erosion of glaciers. Lake Ontario itself lies only in the lowest portion of a much larger basin, the greater portion of which is excavated out of shales of the Medina, Hudson river, and Utica epochs, and in the north-eastern shallow prove a very profitable speculation.

GREAT WESTERN AND GREAT EASTERN RAILWAYS.—
The traffics of these two railways continue to increase, and although

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through Lake Ontario at the foot of a now submerged escarpment, receiving along the way the waters from great buried river channels of which the Genesee river was one of the largest, as the Niagara was not yet in existence. In subsequent portions of the paper he discusses the question where there could have been an outlet for the waters of this great river system, and discusses the causes of the ex-cavation of the lake. The second paper is an exhaustive memoir on cavation of the lake. The second paper is an exhaustive memoir on the palaeozoic geology of the same region. Both papers display a large amount of useful research.

MINING ENTERPRISE ON THE GOLD COAST.

MINING ENTERPRISE ON THE GOLD COAST.

Gold on the Gold Coast formed the subject of a highly interesting paper read before the Society of Arts, on Wednesday evening, by Captain R. F. Buaron—the most popular and entertaining of oif modern travellers. The glory of an explorer, he remarked, results not so much from the extent, or even from the marvels, of his exploration, as from the consequences to which they lead. Judged by this test, both Captain Cameron and he had been not unfavoured of fortune. At Bihé, the province through which his friend and companion pain-fully hurried, an English mission is now established. In his "Wanderings in West Africa," published in 1863, he remarked that in several countries, such as W.N.W. Denkira, Tueful, Wasa (Wassaw), and especially Akim, the hill-region lying north of Accra, the people are still active in digging gold. The pits, varying from 2 ft. to 3 ft. in diameter, and from 12 ft. to 50 ft. deep [89 ft. is the extreme), are often so near the roads, that loss of life has been the fesult. "Shcring-up" being little known, the miners are not unfrequently buried allve. The stuff is drawn up by ropes in clay pots, or calabashes, and thus a workman at the bottom widens the pit 4x a pyriform shape: tunnelling, however, is unknown. The excavated earth is carried down to be washed. Besides sinking these holes, the natives pan in the beds of rivers, and in places collect quartz, which is roughly pounded. The Fantes often refuse to dig deeper than the chin, for fear of the earth "caving in;" and, quartz-crushing and the use of quicksilver being tunknown, they will not wash unless gold "show colour" to the naked eye. As we advance northwards, from the Gold Coast, the yield becomes larger. . . It is becoming evident that Africa will one day equal half-a-dozen Californias. . . Will our grandsons believe in these times . . . that our Ophir, that our California, where every river is a Tmolus and a Pactolus, every hillock is a gold field, does not contain a cradle, a puddling machine, a qua

member.

The characteristic and brilliant style of narrative with which

bringing with him the first gold. Presently a company was formed for the purpose of carrying on the gold trade between Portugal and Africa. Its leading men were the navigators Lanzarote and Gilanez, and Prince Henry "the navigator" did not disclain to become a The characteristic and brilliant style of narrative with which Captain Burton's name is identified was then brought fully before the meeting. He stated that he and Captain Cameron landed at Axim on Jan. 28th of the present year. The delay was at once inevitable and Jan. 28th of the present year. The delay was at once inevitable and Jan. 28th of the present year. The delay was at once inevitable and Jan. 28th of the present year. The delay was at once inevitable and Jan. 28th of the present year. The delay was at once inevitable and Jan. 28th of the Jan. 28th of Jan. 28th o

sink pits to act as shafts, the wives pan the pay-dirt from "women's washings," and expect to extract from 40 to 50 lbs. of the gravelly

, soil immediately below the surface-humus between half a dollar and two dollars a day. Why not, then, begin at the beginning, and wash on the largest scale the overburden before attacking the rock? The proceeds of panning would purchase machinery and pay its transport; and, at last, when the hillocks are cleared of trees whose roots hide nuggets, and are levelled by the jet or sluice, the quartz-reefs will stand out, like those of Arabian Middian, in the form of stone walls. These will be worked by mere quartying with the sledge-hammer, till the fluor-rock is found. California owes her agricultural, and especially her viticultural, development chiefly due to the hydraulic system, which, in a few years, prepared her surface for husbandry on a large scale. It will be the same with the Gold Coast.

With regard to the labour question and the climate, Captain Burton gave very satisfactory details, remarking, in connection with the latter, that of the four English managers of mines three have retained vigorous health after years of residence on the coast. Only one suffers from rheumstie gout, a complaint certainly not confined to Western Africa. Recapitulating, he observes that the good news they brought home is the prodigous wealth of the land. He knows nothing to equal it in California or in Brazili. Gold-dust is panned by native women from the sands of the seashore. Gold spangles glitter after showers in the streets of Axim. Gold is yielded by the lump of yellow swish that rivets the waitle walls of hut and house. These washings range from half an ounce to four ounces per ton. In California, 9d. pays. There, then, is the gold, and it will be our fault only if it remains there. During the last century this section of the West African Coast annually exported to Europe between 3 and 3½ millions sterling of gold, in the shape of dust, nuggets, and bars. He sees no difficulty in again raising the export of West Africa to the highest figure it showed during the last century, and he knows no land better able to supply t

Gold Coast.

Captain Cameron gives his description of the district in rather more

Gold Coast.

Captain Cameron gives his description of the district in rather more technical language: He says that the first part of their journey from Axim was to visit the Izrah mines. Those mines had been formed into a company, but they were part of the dominion of gallant King Blé, who when nearly every other native chief during the Ashantee War was against us got his people together and fought for us bravely like a man. King Blé came to call upon them, carried by four sturdy natives in a thing like a big basket lined with red cloth. He wore on his head a general's cocked hat with a plume presented to him by the English Government. He also wore his general's sword and the Ashantes medal, and in each corner of the basket in which he was carried was ofte of his gold-hilted swords, the emblems of royalty. After the first ceremony was over he came in divested of his gorgeous robes, and wearing one of the seedlest hats ever seen. He spoke about their going to visit his village, Attaboo, and other places which he thought were gold bearing and valuable. As soon as possible they started on their journey, but the ordinary African delays always occurred. They had a number of men counted out and mustered before their door in the evening, and at six o'clock in the morning when they were about to start they had to go through the same thing again. There was good-will amongst the people. They then started out to Axim.

Passing along first came some dwarf cliffs of red clay much like

Passing along first came some dwarf cliffs of red clay much like those one saw on the Tanganyeka. When on that river he was not on a gold exploring expedition so did not try any of the ground, but from what he had seen on the West Coast of Africa he was perfectly certain a gold exploring expedition so did not try any of the ground, but from what he had seen on the West Coast of Africa he was perfectly certain that on the Tanganyeka and other places in the district gold was to be found, but not in the same quantity as on the Gold Coast. Passing one or two streams they went along a bit of a beach, and passed by a hill where one of the Dutch forts stood, which was once attacked by the natives, and it was a scene of heroism which had scarcely been surpassed. The Dutch commandant, finding all his ammunition was gone as well as nearly all his provisions, opened the gates and admitted the enemy to the fort. He, at the same time with his men, stood over the magazine, and at a given signal every one was blown up immediately. Crossing a river at this spot they came into Appolonia. For the first distance up to Attaboo each village was a separate tribe. At Attaboo was the chief settlement of King Blé. They met King Blé there, who instead of being dressed in a general officer's uniform was in his Fetish dress. The next place westward of that was Behin, which in ancient days was considered a strong fort. Behin was an old English port. They found remnants of the old Ashantee war, when those people had fought against King Blé. They found all along here the black sand, out of which nearly every gold miner knew when he was crushing and washing that he would find gold. It was not, however, in every case that they found gold. In this case it was titaniferous iron. All along the beach they found that gold-bearing sand. He had seen a woman in two hours wash out 3s. 6d. worth of gold. They called a day's work from ten to twelve hours, and were dissatisfied if they did not make 4s. They had been known to make as much as 22s. That was not all the year round, but when the fresh water came down and washed the black sand on the coast many women might be seen washing for the gold.

Immediately behind this they found the commencement of the hills, in nearly every case, running between N. 4 E. and N. 24 E. T

Maxing for the gold.

Immediately behind this they found the commencement of the hills, in nearly every case, running between N. 4 E. and N. 24 E. There was only one case in which the lode was distorted. They were probably in olden times the islands of an archipelago. In between these ranges of hills there were numerous valleys. In those valleys he believed would one day be found one of the greatest sources of their riches. It would be the cheapest way to begin to work by some mechanical means to rest at the bottom of those valleys, and the same machinery which was pumping the water up would be also washing it down. Not precisely the same as was done in Australia, but by raising it by the simple agency of a steam fire engine, and also washing the sides of the parallel reefs down, and seeing which contained gold. They went on further and found more gold, and afterwards they went on to Axim, finding all the way thorough gold formations. He had some bags with him (but which were not opened yet) which contained samples of different formations out of the river bank, in all of which they found gold. He did not say they would find gold enough in them all to pay, but they would find gold of visible colour. He (Captain Cameron) had taken a couple of pounds weight of the mud brought from the lagoon in which the natives built their houses, and he found gold in it—in the stuff they were going to plaster their houses with. From Axim they went by the surt-boat and found after eight hours work they were about 2½ miles from the coast. They went on until they came to the first small river, and her found a number of the rest and runner of the rest and rounds after eight hours. work they were about 2½ miles from the coast. They went on until they came to the first small river, and here they found a number of

work they were about 2½ miles from the coast. They went on until they came to the first small river, and here they found a number of small islands and every one of them containing reefs. They went up the river some distance till above the lagoon formation of the river, when they arrived at Coomassie; but not the Ashantee Coomassie. He believed in this case it was used to mean a town. Here they found reefs lying parallel to the river running through them. They found the river was running in such a way that it was easy to put dams across on the reefs and take the surface washings of the hill, and out of that they got good results, and also out of the quartz which was found in the diggings and the boulders good results were obtained.

The next thing they did was to go up the Ancobra River, and visit the Ingotru mines. Ingotru was enormously rich, but it would be very unfavourable for men to work in. Soon afterwards I passed a a hill, which I heard a friend of mine had an interest in, and I stopped the boat and asked the men to get some swish or mud from the hill, and I got a woman to wash it. Unluckily in the hurry of leaving Liverpool he left the sample behind him, but out of 1½ bs. there was gold which would be called good fine gold. Then they passed the Akankoo mine, which was worked by both Dutch and Portuguese, and went up the river to Tomento. (?) Here the great mistrature of their inverse occurred. They wasted to do to grantly in the river to Tomento. (?) passed the Akankoo mine, which was worked by both Dutch and Portuguese, and went up the river to Tomento. (?) Here the great misfortune of their journey occurred. They wanted to do too much in the time like a good many other travellers. He (Captain Cameron) had been ten or twelve hours in the launch trying to get his bearings, and he was sitting up at night in the dew to get his dead reckoning, and the result was he caught the fever. Captain Burton also got it, as he (Captain Cameron) thought from visiting him. They both had to go down to Axim again. Captain Burton did not recover so readily as he (Captain Cameron) did, and it was decided that it was not wise that he should go on. He made a voyage down the coast for his health; but it was impossible for him to go on. He (Captain Cameron) went back and went up the Ancobra river to the furthest practicable point for navigation, namely, to Boota-Boota (?) Falls. He ron) went back and went up the Ancobra river to the furthest practicable point for navigation, namely, to Boota-Boota (?) Falls. He visited the Isankow concession. They found native shafts, and at a depth of 8ft. they came upon what was the deposit of some of the old lagoons, all of which showed good gold-bearing ground. The upper part had traces of gold in it, those deposits of part pebbles amongst this earth in which they were embedded, and some of which he had seen crushed, had gold in them. He went back again to Tomento, which was one of the points where the present river navigation ended.

All the way across the country, leaving Tomento and leaving the Boussa river, he found the same hills, and in many places he blue quartz, similar to that which was in the Akkankoo mine. o mine. After ag Boussa there were the same varying hills. He then came to acquah mine. The Effuenta mine, the first one he saw, had got acquae versited. They had not got audicient stamp nows yet. the Tacquah mine. The Effuents mine, the first one he saw, had got the machinery erected. They had not got sufficient stamp power yet, but they could put down 100 tons a day, and could work about 10 tons

a day. While speaking of these mines he wished it to be understood that he was not interested in any one of them, and he was not advertising. He simply walked past, and he was trying to tell them honestly what the facts were, and to give his views of the properties as he had seen them. Messrs. Swanzy, who had a concession, had done most gallant work in pioneering. They had sent out machinery and had made roads to transport the machinery; but other companies, he was sorry to say, had not kept them up since Messrs. Swanzy's machinery had been there. As to the samples in the room, very likely many of those present would think those in which they saw the most gold was the best ore. That, however, was not always the case, and the reef in which there was visible gold was not the one he should work. The oldest mining company on the coast was the African Gold Coast, which was half English and half French. There had been a question about using machinery which had never been tested in other countries, and in consequence there had been mercury lost and money lost; but all those experiences would be for the advantage of those who sunceeded and those who competed with the companies on the coast. He found everywhere, that in all the valleys between the hills there was always a certain amount of covering soil on the skeleton of the hill. All that was gold-bearing stuff which could be worked out; but the natives had never been able to work it out, owing to their failure of mechanical appliances. When they were able to strip this earth there would be cheaper work than had yet been done on the Gold Coast.

In the course of the discussion upon Captain Cameron's remarks.

the hill. All that was gold-bearing stuti which could be worked out; but the natives had never been able to work it out, owing to their failure of mechanical appliances. When they were able to strip this Cardat.

In the course of the discussion upon Captein Cameron's remarks, Surgeon-Major Horton said that he had been for years on the Gold Coast, and had taken very great interest in the subject of gold mines on the Gold Mines on the Gold Mines on the Gold Mines on the Gold Coast, and had taken very great interest in the subject of gold mines on the Gold Coast, and being an African, and loving his country, he halled every means that was used to develop and civilize it. He felt that the gold mines would be one of the best means of improving, of renovating, and uplifting the country from its present degradation. He might say for himself that he owed a great deal to this great nation, and, speaking as an Affeax, he could assure them that the Antion, and, speaking as an Affeax, he could assure them that the Antion, and, speaking as an Affeax, he could assure them that the Antion, and, speaking as an Affeax, he could assure them that the Antion, and, speaking as an Affeax, he could assure them that the Antion, and appears the surface of the Antion of the Antion of the Affeax he could assure they had the Dutch had occupied the place for 200 years they were far below the English. The Dutch inhabitants were still superstitious and uncevilized, but as soon as they came to the British possessions they found a great advance in civilization. Education had taken as spect, and also more religiously inclined, than their neighbours. He halled every effort that wes made by the British nation to help poor Africa. He could assure them that in the Gold Coast for Africa they had a California. It would be a good discovery if it was well developed. They had opened mines first on quart reels with Large quantities of gold in them, but unfortunately these were only "pockets," and account of the Africa of Africa they had they are also be

white men who got up the expedition to go to Appolonia, he was the only one left. The other five had been dead many years. He did not mention those circumstances by way of egotism, but to show what were likely to be the chances of our countrymen if they were tempted to go out in great numbers. There was that in the climate of the West Coast of Africa against which no white man could stand. Mr. A. Shippey said from information which he had there was at present along the Desert of Sahar unlimited quantities of gold. There was a rich country there, and that could be proved. Mr. McCarthy said he had been out to the West Coast, and he might say that the Government did not take care of the men they sent out there. It was scandalous the way in which they took care of their men. The Mining Company's men did not die so fast. In the Ashantee war the death rate was only equal to 23 per thousand, and that was about the death rate of a healthy town. That showed that if the men were properly taken care of, they would be all right. He fully confirmed what Captain Cameron said about the richness of the country. The country was overlaid with drift, and under that they got the gold-bearing ground. The natives had worked the ground from time immemorial, and their reports were sufficient to prove the amount of gold that could be got by their rude mining.

Having returned recently from a six months' tour in the gold mining districts, and having visited every one of them, Mr. Walker observed that he might be competent to say a few words as to the richness of the country, but he should confine himself to the climate. He had passed 31 years on the West Coast, and he thought he was as healthy a man as any one in the room. He could name several of his friends who

that he might be competent to say a few words as to the richness of the country, but he should confine himself to the climate. He had passed 31 years on the West Coast, and he thought he was as healthy a man as any one in the room. He could name several of his friends who were there, and they also were as healthy as any man present. But he might say that any one who went out to the West Coast of Africa without a good constitution should take care of himself. If he worked hard he could reside there for years, but if he did not work he would die. Who were the most unhealthy men on the West Coast of Africa? The officers of the West India regiments were, because they had nothing to do. There was an old saying that three classes of men went to the West Coast—the temperate man, the hard-drinking man, and the testotaller. The temperate man lived the longest, the hard-drinking man had the second chance, and the testotaller died first. Captain Cameron added that he might say that some of the old pits were not down very far, but as far as they had gone there was gold. He, however, should not like to commit himself to any statement until he had worked it out and had got the advice of geologists. He had made observations and hoped to be able to give them some further information at some further time. As to fever, medical men had persisted in giving numerous doses of calomel, and he himself used to give quinine, but he would now fight any fever with Warburg's incture and arseniate of quinine. They learned how to live in places, and they progressed with experience. He thought the West Coast of Africa had not been properly studied; it was a combination of an amount of experience, and it was not always one man's experience that would bring it forward. Get a good healthy amount of work—that was the way to keep themselves healthy.

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NEW GOLD WASHING MACHINE.

NEW GOLD WASHING MACHINE.

For some time past an improved gold washing machine—the Dry placer Amalgamator—the invention of Mr. E. S. Bennett, of Denver, Colorado, has been in use in the Pacific States, and although several improvements and modifications upon the original invention were, as is usually the case with new mechanical contrivances, found to be necessary, it is claimed that the amalgamator is now perfect. As at present arranged, the machine feeds itself, saves the gold, and rejects the tailings so clean that no trace of the precious metal can be found in them. It seems difficult, says the Rocky Mountain News, to conceive a more simple arrangement than this machine when one sees it at work. Looking down in the tank filled with water in hundreds of eddies, the large cylinder revolving half submerged in the tank, receiving all that can be poured into its spiral-shaped iron gullet, and on its opposite end spitting out the soured and thoroughly washed boulders, pebbles and gravel, and dropping into the large tank all the finer particles—and gold—where the two rows of jets, which are arranged in the bottom of the two ralleys above referred to, are performing their duties of driving about from side to side, up and forward, these finer particles, robbing them most effectually of all their gold, and finally dumping the valueless sand out of the tailing end of the tank, by means of an iron wheel, kept steadily at work by an endless chain attachment to the gearing of the engine.

With regard to the mechanical construction of the dry placer amalgamator the Commercial World and United States Reporter states that it is a very simple machine, saving gold by two old and well tried methods—gravitation and amalgamation. Mr. Bennett claims nothing new except that he has combined in a simple machine those two well-known forces in such a manner that each may act under the most favourable conditions and thus avoid loss by either. The machine is made wholly of wrought and cast-iron, is mounted permanently on wheels, and is

claims nothing new except that he has combined in a simple machine those two well-known forces in such a manner that each may act ander the most favourable conditions and thus avoid loss by either. The machine is made wholly of wrought and cast-iron, is mounted permanently on wheels, and is operated by a 6-horse engine, also mounted. The gravel is passed into a revolving cylindrical grate which is partially submerged in a main tank of peculiar shape. The coarse material, stone, &c., is by this grate thoroughly scoured and discharged as coarse tailings. The finer or pay dirt is washed by the action of the grate into the main tank, here dropping lightly through the water it falls on the bottom, or more properly on the incline sides of the main tank, which is lined throughout with patent amalgam plates. Much of the gold is saved at the first dropping just referred to, but what is not is now received with the accompanying sand by the first of a series of water jets, and projected upward and slightly forward. It drops again but a little in advance of where it first fell and again the gold is caught on the plates. This operation is repeated until each particle has passed over a number of these submerged jets. The sand robbed completely of precious metal is passed by the last jets into a tailing tank, whence it is removed by a tailing elevator and discharged as fine tailings. The coarse particles of gold, those having sufficient gravity to settle in comparatively still water, settle at once between and below the jets, and are not again disturbed till the "clean-up." The cost of handling the dirt by the sluice is 40 cents per cubic yard. The cost by this means will be reduced to about 3½ cents per cubic yard. It is admitted that the sluice does not save all the gold by from 25 to 75, and in some cases even a greater per cent. It is equally well proven, and is capable of the occular demonstration that the machine does are (practically at least) all the gold.

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HYDRAULIC TUNNELLING AND EXCAVATING.

In a convenient place at a distance from the working face in the open Mr. T. R. CRAMPTON, of Victoria-street, proposes to provide pamping machinery for the supply of water at considerable pressure, or, where convenient, he obtains water at sufficient pressure by gravitation. This water he leads by pipes to the working face, where he provides a hydraulic motor engine, which it drives. The hydraulic engine actuates a mining or excavating machine or machines suited to the rock or material in which the tunnel is being formed. The motor engine or engines driven by the water also

bydraulic engine actuates a mining or excavating machine or machines suited to the rock or material in which the tunnel is being formed. The motor engine or engines driven by the water also actuates mills or crushers by which the debris brought down by the mining or excavating machine, or it may be by manual labour is reduced, or broken down. In some cases the debris from the mining or excavating machine may be so fine as not to require to be passed through a mill or crusher.

The crushed or reduced debsis is mixed with the water discharged from the hydraulic motor or motors. In this state of admixture with water the debris is passed into an exit pipe which is led back to the place of discharge. If the distance is very long the pressure water or water from the main led into the tunnel is also made to actuate pumps near the working face to propel the stream of debris and water through the exit pipe. Or in place of or in conjunction with pumps, jets of the pressure water may be applied at one or more points upon the exit pipe to propel the stream laden with debris to the outfall. For shorter distances the suction of pumps at the bottom of the shaft rising to the surface will suffice. In some cases the tunnel may be at such an inclination that the debris mixed with water will flow out by gravitation. When necessary in tunnelling, he causes the water to pass into the pressure or inlet main charged with air, which air it liberates when the pressure is relieved on the water passing out of the hydraulic motor engines, and thereby air is supplied to ventilate or assist in ventilating the tunnel, and for cooling the tunnel, especially at the part where the work is in progress. in progress.

COAL ELEVATING APPARATUS.

Improved apparatus for elevating or distributing coal, salt, and various other substances, have been invented by Mr. John Wood-Ward (of Adam Woodward and Son, Manchester). He creates a partial vacuum, so as to produce a strong current of air in a pipe through which the material is to pass for conveyance to the required destination. He prefers to produce the current by a steam jet, but a pump or other air exhauster may be employed if desired. He forms a chamber at the highest point, or at or near the destination to which the material is to be conveyed or discharged, and extends a pipe from this chamber to the material to be conveyed, and this pipe or chamel should be internally free from obstructions and sharp bends, if et also scare that the air and material to be carried or propelled shall both enter freely, and so that the orifice does not get blocked er substances, have been invented by Mr. John Woodshall both enter freely, and so that the orifice does not get blocked or choked up by having too much material at a time in front of it. In some cases and for some material which tends to adhere and cake together he employs a mechanical stirrer or agitator to act upon the material as it enters the pipe to divide and separate it, and this agitator is or may be worked by hand or machinery, or by the entering air or a part of it passing against a propeller vanes or working an airengine to drive the agitator. He has a pipe connected with the chamber at the delivery end of the pipe, and exhausts this pipe, and thus the plays her has a series of the pipe.

camber at the delivery end of the pipe, and exhausts this pipe, and thus the chamber by a steam jet apparatus (by preference), or the Mean jet apparatus is directly connected with the chamber.

When in operation, the material to be elevated or propelled is drawn along the pipe into the chamber, and when full the draught is or may be shut off and material allowed to pass out by gravity down a shoot to be delivered or distributed as desired, and the de-

livery pipe from the chamber is arranged and jointed if desired so as to be movable, or it is formed of flexible material so as to be movable to deliver and distribute the material as required. The pipe where the material enters is or may also be made movable or flexible to bring it to a position to take up the material to be conveyed. The chamber into which the material is drawn is or may be formed in two compartments or made double, so that, when one is veyed. The chamber into which the material is drawn is or may be formed in two compartments, or made double, so that when one is filling another is emptying, in which case valves are arranged to shut off the draught into and from one compartment or chamber, and open it into and from the other, and shut the outlet for the material from one compartment or chamber and open it from the other alternately, or the compartments or chambers are or may be movable by hand or by self-acting mechanism as the compartments or chambers are alternately filled. Or the chamber has or may have a wheel with arms or compartments, which wheel will rotate as the compartments fill, and as one compartment fills another is emptied, the wheel acting as a valve to prevent air from entering at the discharge outlet from the chamber.

CARNARYONSHIRE GREAT CONSOLS.—The stopes and other points to value in this mine show a steady increase, whilst the output of lead has increased from 30 to 40 tons per month. These returns will, we understand, be further augmented to 50 tons shortly. Taking into account the depth of this mine (only 46 fathoms) the returns of ore are, to say the least, extraordinary, and indicate a lasting and profitshly father. profitable future.

CARN CAMBORNE. - The lode recently cut in the 105 fathom level is steadily increasing in size going east, becoming more productive of copper. It is also getting vughy and letting out more water; indications which are of a most favourable character and likely to lead to discoveries of great value on further development. When it is borne in mind that Carn Camborne lies between Dolcoath and South Condurrow, any improvement or discovery at its present depth must considerably enhance the value of this undertaking.

HOLIDAY HANDBOOKS .- The first of a series of Penny Holiday Hollday Handbooks.—The first of a series of Penny Holiday Handbooks, edited by Mr. Percy Lindley, and obtainable at all Messrs. Smith and Sons' stalls, has just been issued in the shape of a guide for A Trip to the Ardennes, being the programme for a fortnight's tour in Antwerp, Brussels, Namur, Dinant, Spa, Liege, Chaudfontaine, &c. It is certain that very many escape pleasure at great cost instead of enjoying themselves cheaply; but with such a guide as that of Mr. Lindley they can, in five minutes, learn enough to enable them to make their journey pleasant. The series is likely to become very popular. to become very popular.

Mr. Justice Chitty has appointed Mr. Arthur J. Hill official liquidator of Stahan and Company (Limited).
Mr. James Fyfe, of Queen Victoria-street, has been elected a member of the board of directors of the Pilsen-Joel and General Electric Light Company (Limited).

A petition for the winding-up of the Aberdare Merthyr Steam Coal Collery Company (Limited) is to be heard on June 10.

FIRST-CLASS DRAUGHTSMAN is REQUIRED in the Office A FIRST-CLASS DRAUGHTSMAN IS REQUIRED IN the Onice of a large GOVERNMENT ESTABLISHMENT near London. He must have at least twelve years' experience in a drawing office, and at the same time be a thoroughly practical man and a good mathematician.

Applications stating age, qualifications, experience, and salary required to be addressed to "X.," Tenbury Villa, Herbert Road, Shooter's Hill, Kent.

THE CAPE COPPER MINING COMPANY (LIMITED).

Notice is hereby given, that at a Meeting of the Directors of this Company, held to-day, it was resolved,—

"That a DIVIDEND of TWENTY SHILLINGS PER SHARE, free of income tax, be and is hereby declared, PAYABLE on the 24th day of June, 1882, to the shareholders on the books of the company on the 12th June, 1882, and that the Transfer-books be closed during the said 12th June. during the said 12th June.

It was further resolved,—
"That a BONUS of TWENTY SHILLINGS PER SHARE, free of income tax, out of the profits on the ores raised in the year 1881, be and is hereby declared, PAYABLE on the 11th August, 1882, to the shareholders on the books of the company on the 12th day of June." By order of the Board, J. C. LEAVER, Secretary. June.

6, Queen-street-place, London, E.C., May 31, 1882.

RHODES REEF GOLD MINING COMPANY (LIMITED).

Notice is hereby given, that the SECOND ORDINARY GENERAL MEET-ING of this company will be HELD at the Cannon-street Hotel, London, E.C., on MONDAY, the 12th June, 1882, at Two o'clock, p.m., precisely, to receive the Directors' Report and a Statement of Accounts to 31st December, 1821, and to transact the other usual business.

The Share Transfer Books will be closed from Wednesday, the 7th inst., until Tuesday, the 20th inst., both days inclusive.

By Order,

ALFRED NEVILLE FREWER, Secretary.

2, Great Winchester-street, Old Broad-street, London, E.C.

June 3rd, 1882.

THOS. THOMAS, MINERAL AGENT AND ASSAYER, COPPER ORE YARD, STRAND, SWANSEA.

Is prepared to receive Samples for Assay and Analysis, or Consignments of Ore for Sampling and Sale. Works and Mining Requirements Supplied. Best Furnace Material, Steam or Stone Coal, secured for shipment. Large Experience in Works and Treatment of Minerals.

Upwards of Sixteen Years with one of the Largest Firms in the Ore Trade.

References Given.

JOHN THOMAS, STOCK AND SHARE BROKER Mines inspected and faithfully reported on. Mining Machinery valued,
Estimates given for the erection of Mining Plant.
Twenty Years' Experience.
Advice given as to Buying or Selling Mine Shares.
ADDRESS—REDRUTH, CORNWALL.

R. W. B. COBB, STOCK AND SHARE DEALER, 29, BISHOPSGATE-STREET, LONDON, E C.

CALIFORNIAN AND EUROPEAN AGENCY.

509, MONTGOMERY STREET, SAN FRANCISCO, CAL. J. JACKSON, Manager.

LEAD ORES.

Purchasers.
.. Mining Co. of Ireland.
ditto

1	E	AD	O	R	E	S.	
Date. Mines.	To	ms.	Pric	e r	er	ton.	Purchasers.
May 26-Minera	64		Æ	9 1	5	B	. Mining Co. of Ireland
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30-United Van & Glyn	2			8 1	6	D	. Nevill, Druce, and Co
June 1-Garnarvon Gt. Con.	40			8 1	8 (B	. Walker, Parker, & Co
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		LEN					
Date. Mines.	To	ns.	Pric	e p	er i	ton.	Purchasers.
May 25-Minera	. 70	*******	E 4	7			Dillwyn and Co.
			, 4	1 7	1		ditto
- ditto	. 50	******	. 3	18	. 6		Vivian and Sons.
- ditto	. 50	********	. 3	18	. 6		ditto
- ditto	. 70	*******	. 3	15	- 6		Crown Zinc Company
- ditto				15			
- ditto				15			Vivian and Sons.
- ditto				15	- 6	*****	ditto
- ditto	. 30	*******	3	15	6	*****	ditto
30-Pierrefitte	. 50			13	- 6		ditto
-Cwmystwyth	. 35	*******	3				Dillwyn and Co.
-Pandora	30	*********	7	10	6		Vivian and Sons,

COAL MINES REGULATION ACT, 1872.

EXAMINATION FOR MANAGERS' CERTIFICATES OF COMPETENCY.

DISTRICT UNDER THE CHARGE OF THOMAS WYNNE, Esq., H.M. INSPECTOR OF MINES.

NOTICE IS HEREBY GIVEN, that an EXAMINATION for MANAGERS' CERTIFICATES OF COMPETENCY, under the above-named Act, will be HELD on the 30th day of June next, and CANDIDATES INTENDING TO PRESENT THEMSELVES AT SUCH EXAMINATION must, on or before the 24th day of June next, notify such intention to the Secretary of the Board of the above-mentioned District, from whom all information as to particulars can be obtained.

By order of the Board.

By order of the Board, JOSEPH KNIGHT, Secretary.

Newcastle-under-Lyme, Staffordshire. N.B.—Persons who do not reside within the District are equally eligible for amination with those who do.

ENGINES, BOILERS, &c., FOR SALE: —
FIRST-CLASS 50-inch cylinder PUMPING ENGINE
ditto 24-inch "ROTARY ENGINE
CALCINER, STONEBREAKER, &c. Apply to Capt. NICHOLLS, Camborne.

RAILS for SIDINGS, TRAMWAYS, &c., with all fittings complete. All sections, from 10 to 80 lbs. per yard. Shippers enquiries promptly attended to. Apply to G. BRADSHAW, 22, Cooper-street, Manchester.

STARTING OF THE ENGINE AT EAST WHEAL ROSE.—
The ENGINE will be STARTED TO DAY and the dressing of the enormous pile of orestuff at surface raised from Innes' lode will commence forthwith, and sales will shortly be made.

EAST WHEAL ROSE shares should be bought for a great rise. We have special dealings in them fully-paid.

ELECTRIC LIGHT SHARES.—Full information, with special comments on the various systems, contained in June Circular.

The DUPLEX specially recommended.

ELECTRIC LIGHT SHARDS
he various systems, contained in June Circular.
The DUPLEX specially recommended.
INDIAN GOLD MINES receive special attention.
June Circular now ready post free.
ABBOTT, PAGE, AND CO., STOCKEROKERS, 42, POULTRY,
LONDON, E.C.

WANTED, COMMISSION HOUSES, ENGINEERS, GENERAL MILL AND COLLIERY FURNISHERS, ExclineERS, GENERAL MILL AND COLLIERY FURNISHERS. Exceptionally good terms as wholesale, district, and export agents in unrepresented centres throughout the United Kingdom, Continent, and the Colonies. MORGAN'S CELEBRATED IMPROVED BOILER COMPOSITION, manufactured on approved scientific principles for preventing incrustation and neutralising corrosive acids in feedwater.

"An invaluable article at a very low price."

"An invaluable article at a very low price."

ANALYST'S REPORT (Extract).—"I am convinced it will be useful in preventing and removing incrustation without any injurious action on the metal."

Apply to the Patentee and Manufacturer,

W. H. MORGAN, ENGINEER, GLOUCESTER.

WANTED, a SITUATION as MINE MANAGER. Extensive

experience; abilities practical; Plans, Assaying, and three Continental languages; abroad preferred; good reference. Inspections undertaken.

Address, "H. C.," MINING JOURNAL Office, 26, Fleet-street, E.C.

GOLD CRUSHING AND AMALGAMATING.

WANTED, the USE of EXISTING MACHINERY for Crushing and Amalgamating GOLD and SILVER QUARTZ in bulk.

Address, with full particulars as to quantity that can be treated per day, price for use or hire, &c., to "A.Z.," care of Bardo, Stationer, Royal Exchange, E.C.

WANTED, by a Mine Agent, a SITUATION, at home or abroad, who thoroughly understands Mining, Erecting Machinery, Dressing of Tin, and Dressing and Smelting of Copper and Nickel Ores, &c. First-class testimonials.

Address, "E. P.," MINING JOUENAL Office, 26, Fleet-street, E.C.

WANTED, a GOOD SECONDHAND 40 to 50 inch CORNISH ENGINE.

Apply, by letter, with particulars, length of stroke, outside and inside, and price, to "J. H.," MINING JOURNAL Office, 26, Fleet-treet, E.C.

WANTED, for GUNNISLAKE (Clitters) MINE, 200 9 ft. 6½ in FLANGE PUMPS or FOSSET PIPES.

Plans and specifications will be sent free on application to the Purser, Mr. R. T. SKINNER, Abbey Mead, Tavistock, to whom tenders for the whole or part must be delivered not later than the 8th June

A PRACTICAL MINING ENGINEER, thirty-one years of age, practically acquainted with everything in and about a Mine, and now holds the position of Manager and Mining Engineer of Mines, will sail for Africa at the end of this month, offers his services to Survey and Report upon Mines, and will accept the position as Manager of either Gold or Diamond Mines.

First-class references and testimonials from present employers, where he has been for the past five years.

Address, "G.," MINING JOURNAL Office, 26, Fleet-street, E.C.

SLATE QUARRY ENTERPRISE.

MESSRS. D. C. DAVIES AND SON, ENGINEERS, OSWESTRY, usually have a few SLATE QUARRY PROPERTIES that they have personally examined, which they could confidently commend as suitable for either public or private enterprise.

A BBOTT, PAGE, AND CO., 42, POULTRY, LONDON, E.C.,

Recommend at present prices a purchase in

EAST WHEAL ROSE.

OLD SHEPHERDS.

Shares fully paid.

Full particulars of Electric Light and other shares contained in our May

Circular, now ready, and post free.

MR. GEORGE BUDGE, STOCK AND SHARE DEALER
9, GRACECHURCH STREET, LONDON, E.C. (Established 29 years)
ALL BUSINESS TRANSACTED FREE OF ANY CHARGE FOR
COMMISSION.

	ESTABLISHED 1868.	
200 Eberhardt.	50 New Kitty,	20 Ystwith.
200 Exchequer.	70 New West Caradon.	40 Wheal Jane.
50 East Roman Gravels.	50 Mounts Bay.	75 Wheal Coates.
10 East Chiverton.	50 La Plata.	30 Wheal Kitty.
100 East Caradon.	200 Langford.	5 West Kitty
100 East Blue Hills.	90 Kapanga.	50 West Polbreen,
50 Drakewalls.	40 Killifreth.	100 West Caradon.
50 Devon Friendship.	150 Kirkmichael.	100 West Crebor.
10 Devon Consols.	40 Herodsfoot.	20 Tolima.
100 Don Pedro.	50 Hingston Down.	15 Trevaunance United
50 Canada.	100 Gold Hill.	25 South Tolcarne.
100 Consolidated.	20 Goginan.	50 South Devon.
100 British Australian.	150 Gawton,	60 South East Wynaad.
30 Bratsberg,	50 Guinea Coast,	100 Parys Copper.
50 Bedford,	20 Gunnislake (Clitters).	150 Sortridge Consols.
100 Birdseye Creek.	10 Frongoch.	50 Prince of Wales.
50 Akankooo,	50 Flagstaff.	50 Ooregum.
FO Alvanhana	SO Pleased.	***

MESSRS. CUNLIFFE, ENTWISLE, AND CO.
FINANCIALISTS,
MINING AND CONSULTING ENGINEERS,
MINERAL ASSAYERS,
STOCK AND SHARE BROKERS,
77, BLOOMSBURY, OXFORD STREET; AND 2, UPPER BROOK STREET,
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Bankers: Manchester and Oldham Bank (Limited),
Pall Mall, Manchester.

MR THOMAS CORNISH, CONSULTING MINING ENGINEER
AND FINANCE AGENT.
Twenty-five Years Practical Experience in Australian Gold Mining and Management.
Advice on Gold Mining Investment.
Author of "Gold Mining: its Results and its Requirements."
\$1, FENCHURCH STREET, LONDON, E.C.

TO PARENTS AND GUARDIANS.

AN ELIGIBLE OPPORTUNITY is now offered for the SETTLEMENT of an ACTIVE YOUNG GENTLEMAN IN CANADA-He will be enabled to obtain his profession as a Solicitor in five, or if he be a Graduate in three years Cost of living about £150. In the meantime he will have active work, and obtain a knowledge of the Dominion, which is destined to become one of the most prosperous of the Colonies. Fremium, £100 sterling.

12, Wellington-street, Teronto.

Canada Land and Lean Agency

WATSON BROTHERS' MINING CIRCULAR.

WATSON BROTHERS,

MINEOWNERS, STOCK AND SHARE DEALERS &c 1, ST MICHAEL'S ALLEY CORNHILL, LONDON

In the year 1862 Camborne Vean and Wheal Frances sold 572 tons of copper ore for 2512l. 8s. 1d., and tin, 17 tons, 1119l. 16s. The shaft was then 242 fathoms deep, with a large lode producing stuff worth 3 cwts. of tin to 100 sacks. The mine was then in 4600 shares, 17s. paid up.

ears before this we had worked this mine in conjunction

Many years before this we had worked this mine in conjunction with Stray Park.

Great South Tolgus was rich for copper, but was not to our knowledge ever proved for tin. In 1862 the mine sold 916 tons of copper ore for 7485t. 15s. 4d.; tin, 1470t. 16s. 3d.; and tin was then coming into the bottom of Lyle's shaft, and worth 100t. per fathom. In 1861 the dividends paid were 3000t.; 1859, 11,000t.: total dividends in copper, 47,550t. The mine was under the same management as West Basset and North Basset were at that time, and was also chardened like them. also abandoned, like them, on the failure of copper.

A correspondent of the Journal asks at what depth tin first came in at Dolcoath, and we may state at the 190 fathom level. In the old workings for copper the mine made 600,000l. profit. This was obtained from the 10 to the 160 fathom level. From the 160 to 190 obtained from the 10 to the 160 fathom level. From the 160 to 190 the mine was in its transition state, yielding tin and copper. From the 190 it has been very rich for tin. At the 220 the lode branched off, and to the 240, the branch has been the richest course of tin ever seen in the mine, worth 2001, per fathom. One peculiarity of the lode is that it has made equally rich in killas and in granite, passing from one to the other without change either in size or character. This shows the great strength of the lode. The mine has been in work about 130 years, and has produced over five millions. Originally it was in 60 shares, and during its transition state 17 were relinquished or thrown up, reducing the number to 43. In 1850 the shares had been sub-divided into 178, and they sold at 121, each, equal to 21361, for the mine, which has since sold at the rate of equal to 2136l. for the mine, which has since sold at the rate of

In reference to the strength of lodes, we may remark that in In reference to the strength of lodes, we may remark that in another rich copper mine, the old Tresavean, the riches were found in a huge basin of granite, and wherever the lode touched the killas it split up and became poor. In some mines the ores make in killas or clay-slate, and become poor when they entered the granite. The favourite spot, however, among old miners was near the junction of killas and granite, and in a "keenly gossan."

And speaking of gossan brings us to the Devon Consols, and a remark made by one of the directors at the meeting. He was told, he said, by Capt. Clemo, that the great discovery which yielded the enormous wealth at Wheal Maria was unexpected by those working there 10 minutes before the discovery was made. This we suppose might be said, literally, of any discovery ever made. But certainly a "discovery" at Wheal Maria was not so very unexpected at the time. Many years before, old Mr. Hitchens sunk the pit in the pheasant preserve of the Duke of Bedford, and reached a splendid gossan before he was warned off, and compelled to close his pit, which was then 14 fms. deep. We have no connection with the present company, but all its early history, when our friends held the whole mine, is well known to us, and so early as 1845 we paid our first visit to the property. Josiah Hitchens, the son of the old miner, was a connoisseur in gossans, always had a hankering after them, and especially so for that found by his father. So, in 1844 he obtained a grant of the sett from the late Duke, and a private company (consisting of Messrs. John and W. A. Thomas, Messrs. Gard and Morris, Josiah Hitchens, and one or two friends) in 1024 shares, of 11. each was formed. In August, 1844, operations were commenced in the old pit, and after deepening it 3 fms. only, ore was struck in the gossan on Nov. 4. Of course the discovery, like all such discoveries, was pooh-poohed at the time. Writing of it in the Mining Journal after our visit in 1845, we said few people among the croakers believed in its long continuance—it was "too rich to last, would soon cut out," &c. Yet the first year it made a clear profit of 72,7041. And speaking of gossan brings us to the Devon Consols, and a re

When the discovery was first made Messrs. John Taylor and Sons took up the adjoining ground west, and called it Fortescue. We took up, in conjunction with Mr. John Bailey, the next ground, and called it West Maria. What Messrs. Taylor spent we cannot say, but we abandoned West Maria after a loss of 50001. Then a Glasgow company took both setts, and called them West Maria and Fortese

Before the discovery of Devon Great Consols Wheal Crebor ad-joining had returned 150,000% worth of ore, discovered in cutting the Tavistock Canal

The sampling at Wheal Crebor this time is 396 tons of ore.

At Prince of Wales 37 tons of copper ore and 30 tons of burnt

Wheal Basset has been inspected by Capt. Rich, and his report must be very satisfactory to the shareholders. He says they may "congratulate themselves that the prospects of the mine are most brilliant; the works have been well carried out, and I believe Capt. Trevena will soon bring the mine into a profitable state of working."

At Carnarvon Copper the lode in the 70 cross-cut at Garnon's has improved during the week, and several barrows full of rich ore broken from it. In the 46 at Cae-y-groes the lode looks better and agents expect daily to cut something good.

The lode at West Crebor is becoming larger, and still worth at

least 15L per fathom.

The lode in Ida shaft at Morfa Du has further improved to 7 tons

At Glenroy the lode at the 108 north is 7 feet wide and improving as it goes north.

According to the agent's report it will take 10 weeks to get the shaft down to the 110 at Polrose, and the prospects are very good.

Carnarvon Copper is sampling 50 tons of copper ore, which we expect will bring 14s. per unit or even more.

The Wheal Crebor ore assays as follows—97 tons, $5\frac{1}{2}$; 86 tons, $5\frac{1}{4}$; 4 tons, $5\frac{3}{4}$; 77 tons, $5\frac{3}{4}$; 52 tons, $6\frac{1}{2}$. Before the sale we hope the 84 tons, $5\frac{5}{6}$; 77 tons, $5\frac{5}{8}$; 52 tons, $6\frac{1}{2}$. Before the standard will still further advance.

The great rise in the standard for ore of 51. 10s. on Thursday is very satisfactory, and will be a great encouragement to copper mining generally.

A VALUABLE CHIMNEY.—That some chimneys are better worth sweeping than others w..s incontrovertibly proved a few days ago at Berlin by the result of an experiment performed upon some soot with which the inside surface of an old flue, pulled down during the late alterations at the Royal Mint, was found to be thickly caked. late alterations at the Royal Mint, was found to be thickly caked. This flue had served for many years as an outlet for the smoke given off by the furnaces in which the bullion undergoes fusion before its conversion into coinage; and it occurred to the architect super-intending the repairs in question that it might be worth while to analyse the soot lining the chimney through which fumes of boiling gold and silver had passed in such quantities. The liquefaction of the less precious metal requires a temperature of 1000° Celsius, whilst that of gold cannot be effected under 1250°. It is usual to bestrew the surface of these metals, when in a liquid state, with charcoal, in order to hinder evaporation. But, at such a fierce heat as that above indicated, some evaporation is bound to take place. charcoal, in order to hinder evaporation. But, at such a herce heat as that above indicated, some evaporation is bound to take place, and its results were made manifest by the yield of 4 lbs. weight of pure gold, valued at something under 4000 marks, obtained from the soot that was scraped off the inside of the melting-room chimney in constitution.

TO BE ADJUDGED, in the Offices of M. Carre, Notary, 9, Place des Petits-Pères, Paris, on the 30th of June, 1882, the PROPERTY of the COMPAGNIE DES MINES DE FER MAG-NETIQUE, at COLLO, in ALGERIA. Upset price, 400,000 fr. Apply, for particulars, to M. EDMOND MOBEAU, Avocat and Judicial

Liquidator, 22, Rue du Pont-Neuf, Paris.

NEWFOUNDLAND MINERAL LANDS. TO CAPITALISTS.

THE UNDERSIGNED would inform CAPITALISTS that they hold over ONE HUNDRED LICENCES for LAND in the various MINERAL SECTIONS of the Island, and are prepared to TREAT FOR A PORTION OF THE SAME, with a view of thoroughly prospecting such licences, and eventually working those upon which COPPER, LEAD, or other Mineral may be found. Each license comprises these course wiles. upon which COPPER, LEAU, of outer Apply to—
license comprises three square miles. Apply to—
JOHN STEER,
JAMES BROWNING.

St. Johns, Newfoundland, April 17, 1882

NICKEL MINE, IN NORWAY, FOR SALE.—
KORNBROEKKE NICKEL MINE, the ore of which, according to the analysis of Dr. Fresenius, of Wiesbaden, contains 3 per cent., IS TO BE SOLD.

For particulars, apply to A. SEEHUSEN, Arendal, Norway.

MESSRS. WM. DEW AND SON WILL SELL, BY PUBLIC AUCTION, at the Gwydyr Hotel, Bettws-y-Coed, on Friday, the 15th day of June, 1822, at Four o'clock in the afternoon, prompt, subject to conditions then and there to be produced, all that

The property of the Capel Curig Slate and Slab Quarry Company (Limited) situate about four miles from Bettws-y-Coed.

Lithographed plans, full particulars, and samples of the slates may be had of Messrs. MARK OGDEN and Son, 21, Cannon-street, and Messrs. Boote and Edgar, Solicitors, Booth-street, Manchester; and the Auctioneers, Wellfield House, Bangor, and Town Hall, Rhyl.

SALE OF LEAD MINING PLANT.

TO BE SOLD, BY PRIVATE CONTRACT, a very large quantity of MINING PLANT belonging to the late Lessees of HURST MINES, in the parish of Marrick, near Richmond and Reeth, in the North Riding of York-E 15 horse power HYDRAULIC ENGINE, with 6 and 7 in. Pressure Pipes

6 in. Pumps, &c.
A first-class OVERSHOT WATER WHEEL, 27 ft. diameter, 3½ it. breast, with

A first-class OVERSHOT WATER WHEEL, 21 it. diameter, -/2
rushing Mill attached.
ONE ditto, 22 ft. diameter, 3½ ft. breast, with Crushing Mill attached.
ONE ditto, 20 ft. diameter, 3½ ft. breast.
7000 Yards of RallES, varying from 24 lbs. to 12 lbs. per vard.
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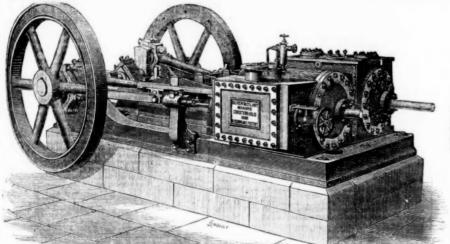
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100000 Don Pedro North del Rey"	1 0	110 /10	10000 100 Ditto, Marine 20 22 23 50000 20 British and Foreign Marine [L]. 4 23 24
205168 Eberhardt, s, Nevada*†	1 0 1	36 %	50000 St Commercial Union 5 21 22
100000 Exchequer, g, s, California*†	1 0	116 9/16	50000 50 Eagle 5 6% 7 5000 20 Globe Marine [L] 11 4 1%
160000 Flagstaff District,* s.g. Utah	1 0		27500 100 Imperial Life
65000 Gold Coast, g, Wassau	1 6	0 1 1%	100000 10 Lion Fire [L] 2 34 1%
250000 Gold Mining Assn. of Canada* 75000 Great Southern Mysore,* g	1 0	0	35862 25 London 1214 60 62
120000 Hoover Hill,* g, North Carolina	1 0	36 36	40000 25 London and Lancashire Fire 2\(2\) 4\(4\) 5\(4\) 50000 20 London and Provincial Marine 2 4\(4\) 5\(4\)
120000 Hoover Hill, *g, North Carolina 10000 Hornachos, *s-l, Spain	5 0	0 10 10%	1 10000 100 Marine 12 28 29
50000 Indian Consolidated, g	1 0	0 74 114 0 136 156	50000 10 Merchants Marine 2 174 274 50000 10 Maritime 6 67 774 40000 50 North British and Mercantile 834 58 61
100000 Ind. Glenrock, g, Wynaad 1	0 5	0 198 198	40000 50 North British and Mercantile 834 58 61 30000 100 Northern
150000 Indian Phoenix, g, Wynaadt	1 0	0 136 136	40000 25 Ocean Marine 5 7½ 8
150000 Isabelle, g, s, California	1 0	0 1/4 1/4	- Phœnix Fire
50000 Javali, g, Nicaragua*	2 0	1/16 3/16	100000 10 Mailway Passengers 29s 716 8
100000 Kapanga,* g, New Zealand 65000 London and California, g*†;	1 0	56 36	200000 6 Rock Life
65000 London and California, g"t]	1 0	2	
135000 Madras, g, Mysore 100000 Michipicoten, nat. c, Quebec	1 0	1 1%	10000 20 Thames and Mersey Marine [L], 2 13½ 14 40840 20 Union Marine, Liverpool [L] 3½ 5 5½ 50000 20 Universal Marine [L] 3 7½ 8
9000 Missouri, l, pref (fully paid) 50000 Moselle, l, b-l, Germany	10 0	0	50000 20 Universal Marine [L] 3 71/2 8
9000 Missouri, i, pref (fully paid) 50000 Moselle, i, b-i, Germany 35000 Mysore, g, India† 120000 Mysore Reefs, g, Madras	1 0	2 % 1	
40000 Nava de Jadraque, g, s, Spain	1 0	9	
27000 N.Gold Run, Ayd, Cal. (& 23700 pref	1 0	0	MISCELLANEOUS.
75000 Norway, *c, Halsönön and Radön. 200000 Nouv. Monde, g, Ven. (en com.)†. 100000 Nundydroog, *g, Mysore	1 0	J 36 36	Shares, Company, Paid, Price.
150000 Nundydroog, g, Mysore	1 0	0	25 Australian Agricultural 21 10 71 74 10 Brighton Aquanum [L] 10 0 3½ 4½
125000 Ooregum,* g, Mysore 15000 Organos,* g, Colombia	1 0	0 36 36	25 City of London Real Property 12 0 16 16%
150000 Parcherry, o. South-East Wynasd	1 0	0 36 136	15 Poster Porter and Co (T) 10 10 10 19
150000 Parcherry, "g, South-East Wynaad 80000 Pestarena United, g, Italy"†	3 0	U 1/18 1/18	7% Imperial Credit [L] 7 10 7% 7% 10 Milner's Safe [L] 10 0 10½ 11 25 National Discount [L] 5 0 10% 11%
100005 Pierre d'Or,*g, Spain 80000 Pierre d'Er (20000 pref.)	1 0	0	25 National Discount [L] 5 0 10½ 11½ 10 Pawson and Co. [L] 6 0 5 5½
50000 Potosi, g. Venezuelat	1 0	0 1 1%	50 Peninsular and Oriental Steam 50 0 56 58
100000 Providence, q, s, California	1 0	0	Btk. Ditto New Ordinary 50 0 95 105
10000 Ravenscliff, g, N. Zind; c, S. Aust. 20000 Rhodes Reef, g, Wynaad 25000 Rico, s, Colorado (nonassessable).	0 5	0 74 154	8tk. Ditto 6 per c. guar. pref100 0130 135
25000 Rico, s, Colorado (nonassessable). 2600 RioGrandedoSul*(and 31,000 pref.	2 0	0	8tk. Ditto 5 per c. guar. pref100 0112 117 12 Telegraph Const. & Maint. [L] 12 0 29½ 130½ 5 Ditto, 2nd Bonus, 3 p. c.(retd. 2 10 0) 1½ 1½
40008 Bossa Grande, g, Brazil*1 £1 ch.).	1 0	0	1 Zoedone [L]

		AND CO	AL CO)M	PAN	IES		- 1
Shares.		Company.		Pa	id.	Pr	ice.	
£100 A	bbot, John	n, and Co [L] £	75	0	35	30	dis
100 A	Iltami Co	lliery Co. [1	L]	5	0		134	ľ
2 P	shbury Co	. [L] (new)	***************************************	90	0		25	- 1
10 B	lopher Con	hn, and Soil Co. [L]	us [T]	3	0		134	- 1
10 B	lilbao Iron	Co. II.	*********	10	0		416	
20 B	olckow. V	Co. [L]	o (L) A	12	0		15	3/4
20 B	rown, Bai	ley, and Di	xon [L]	40		22	20	dis
100 B	rown, Joh	n, and Co.	[L]	75	0	68	6836	
3 C	akemore,C	seway.Grn	ord.sh.	3	0		-	- 1
. 3 D	ntto (734 r	er cent. pr	mf.)	3	0		-	- 1
100 C	ammeli ar	id Co. [L]	********	80	0		65	.
20 C	annock&E	Iuntington	Coal[L]	10		10%	10 d	
50 C	barlton In	edish Iron	kstl.[L]	10	0		336	
50 C	hatterley	on Co. [L]. Iron Co. [L	.1	50		614	779	
10 C	hillington	Iron Co. [1	41	10	0		2	
10 C	onsett Iro	n Co. [L]		7		17	1736	
10	onsett Spa	inish Ore []	4	1	0	5/8	34	pm
20 D	mrungton	Iron Co. [1	4]	18	10	1	114	dis
50 D	navy Broth	ers [L]	**********	22	10	4	9 36	pm
8 G	enl Minir	Co. [L] g Ass. [L] (ful ad \	20	0	91/6 51/6	9%	- 1
50 W	nowles A	agreem and	C- CT	90			10	
20 L	lynyi and	ndrew, and Tondu [L]	(Oo. [L]	20	0	634	734	- 1
10 L	vdnev & W	igpool Iron	Ore[L]	9	12		2	- 1
10 M	Iarbella Ir	on Ore Co.	[L]	10	0	6	634	- 1
10 M	lidiand Ire	on Co. [L]	*********	- 5	0	136	2	pm
10 10	tonkiana i	tron & Coal	Co. LL	10	0			
100 N	lwyndy Ir	on Ore [L]		3	15	47/2	49	
100 N	Cerbudda (& Blaina(8)	p.e.pri.)	23	0	97		
10 N	ewport At	ercarn Coa	Co. [L]	10	0	834	9%	
35 P	'almer's St	aipbldg, & 1	Iron [L]	35	0		28	- 1
100 P	'arkgate Ir	on Co. [L]		65	0	70	71	
20 P	atent Nut	and Bolt [L]	14		231/6	24	
50 P	earsou and	Knowles,	Δ,	50	0		1436	
5 B	thymner I	and Iron [Iron Co. [L]	M	5		14	236	
10 5	andwell P	ark Colliery	Co. [L1	10		1334	1334	- 1
100 B	hotts Iron	Co. [L]		100	0		55	
25 8	heepbridg	e Iron and	Coal [L]	20	0	1136	12	- 1
50 8	ilkstone &	Dodw.Cl.&	Iron [L]	45	0		-	- 1
50 8	omorrostr	o Iron Co.	[L]	50	0		-	- 1
100 8	taveley Ir	on and Coa			0	73	13	
100 E		ditto	B	10	0	121/4	136	
50 T	redegar Ir	on and Coa	L. A (I.)	30	0		28 14	
25 I	Ditto	ditto	B	25	0		2414	
10 V	ancouver	Coal [L]	**********	6	0		31/4	
25 W	V.Cumberl	and Iron &	Steel[L]	20	0	13%	1334	
		-						
		TO A	NKS.					1

		D 1 2777 0				
	404	BANKS.				
Issue,	1000	ires.		Pd.	Clos.	pr.
100000	10	Agra [L]	*******	all	934	10%
\$0000	20	Anglo-Egyptian Banking	[L]	all	221/2	231/2
30000	40	Bank of Australasia	********	. all	81	
12500		Bank of British Columbia				211/4
20400		Bank of British North An				56
10000	25	Bank of Egypt	********	. all		28
50000	20	Bank of New South Wale	8	all	63	65
100000	10	Bank of New Zealand	*******	all	251/2	2616
25000	25	Bank of South Australia.		. all	371/6	38 1/4
20000	50	Bank of Victoria	********	25	36	38
40000	20	Chartrd, of Ind., Aust., &	China	. all	22	23
30000	25	Ch. Merc. of Ind., Lond.,	Chins	. all	. 17	18
20000	100	Colonial	*******	30	63	65
\$ 50000	20	English Bk. of Rio de Jan	eiro [L	1 10	1436	1534
60000	25	London and River Plate	[L]	10	14%	15%
60000	7		o [L]	all	. 734	734
150000	20	London Chartered of Aus				2234
00000	11	National Bank of N. Zeal	and [I	1 314	. 334	4%
60000	25	Oriental Bank Corporation	m	all	. 17	18
12500	10	Queensland National [L].				934
34900	100	Studrd, of British So. At	rica [L]. 25	. 57	58
60000		Union of Australia				65

GAS COMPANIES	
lesue, Shares, Pd Clos or	
5000 20 Ballio (T.)	
10000. 5 Bombay [L] all 54 54 10000. 5 Ditto, New [L] 4 44 44 29700. 5tk Brentford Consolidated 1.00. 150 155 14000. 20 British all 33 35	
10000 5 Ditto, New [L] 4 41/4 41/4	
29700StkBrentford Consolidated100 150 155	
14000 20British all 33 35	
550000DtkCommercial	
20000 20 Do. do. New, 1869, 1872 14 17 18	
10000 20 Do. do. 7 per ct. Preference all 251/4 261/4	
23408 10European [L] all 18½ 19½	
94850 .8tkGaslight and Coke, A, Ord100 167 172	
20000 20 Do. do. New, 1869, 1872 14 17 18 10000 20 Do. do. 7 per ct. Preference all 25¼ 28¼ 23406 10 European [L]	
John Au., Hong Rong and Unina all 14% 15 474	
2800000.8tkImperial Continental100 183 197	
386500StkLondon100 195 205	
12000 5 Maita & Mediterranean [L] all 11/4 21/4	
100000Metrop. of Melbourne 6 p.c. Deb	
25000 20Monte Video [L]all 131/4 141/4	
10000 5Ottoman [L]	
30000 5Oriental [L]	
500000 Gth South Metropoliton A 100 105 000	
5000008tk South Metropolitan, A	
50000 Diete, ditto, D	
TRAMWAYS.	
40000 5 Anglo-Argentine [L]	
10000 10Barcelona [L]	
7140 10 Balfast Street The man warm all 71/ 9	
2050 10 Rirkenhead Ordinary all 314 416	
2000 10 Ditto, 6 per cent. Preference, all , 91/101/2	
9290 10 Bristol [L]	
3050. 10Birkenhead, Ordinary	
3200 10Chester [L] all	
24000 10 Dublin all 10 11	
14690 10 Edinburgh Street Tramways ali 131/414	
25000 10 Glasgow Tramway & Omni. [Li. 918 18%]	
10000 10 Hughes Loco, and Tram, works, all 7500 10 Hull Street Tramways	
7500 10 Hull Street Tramways all 10 11 10 14	
7500 10 Imperial [L] all 1 1/2 2	
7500 10 Imperial [L]	
25000 10London [L] all14 15	
15000 10 London Street Tramways 30	
goods to North Metropolitan all184419	
8000 10 Nottingham and District [L] all 1034 1034	
15947 10Provincial [L]	Ш
6000 10Sheffield	
5000 10 Southampton all 81/81/4	
6000 10Sunderland [L] all 3	Ш
10000 10Swansea [L]	an.
12000 10 Tramways of France [L]	М
16500 10Tramways of Germany [L] all 546	а
10000 10	
40000 5 Tramways Union [12]	Ш
25000 10 Vale of Clyde	
1300 10 H Oldernminhoon fraftigues and an analysis	
	а

	TELEGRAPH COMPA	NIE	S
har	n	d.	Clos. pr.
the le	Anglo-American100	0	531/2 541/2
13	Brazilian Submarine 10	0	1136 1138
10	Cuba 10	0	834 974
10	Direct Spanish 9	0	6 6 2
20	Direct United States Cable 20	0	121/4 121/2
10	Eastern 10	0	10% 10%
10	East, Exten. Austr. and China 10	0	11/2 11/4
10	German Union 10	0	91/2 10
10	Great Northern 10	0	121/4 131/4
95	Indo-European 25	0	28 29
10	London Platino Brazilian 10	0	. 434 434

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